

THE ZOIST.

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I. Believers and Disbelievers ; or, Who are the Fools ?

THE curious spectacle which is exhibited at the present day, of a large number of individuals not only obstinately refusing to believe facts supported by a body of evidence amply sufficient for their establishment, but actually priding themselves upon their own obtuseness, and designating their more gifted and less prejudiced contemporaries as credulous dupes or unprincipled impostors, is a phenomenon fraught with so much interest to the cerebral physiologist, that it may be well to devote a few pages to its consideration. Amongst other "extraordinary popular delusions," let us examine that strange hallucination which leads its victims to mistake the narrowness of their own mental vision for superior clear-sightedness, and deceives them into attributing to greater penetration what proceeds in reality from inferior sagacity.

Well assured that, when truth and falsehood are placed before the mind, to make a wrong selection indicates a mental defect, let us endeavour to discover in what this defect consists, and analyze the different sources of an unbelief which in this instance constitutes a rejection of truth ; not without the hope that, by so doing, we may bestow on some a self-knowledge which may teach them a becoming humility and impart to others an insight into the fallibility of the idols before whose judgment they have been accustomed implicitly to bow down.

In our endeavours to convert the public it is also well to ascertain the causes of the inertia and opposition we have to contend against, because, though this knowledge may be insufficient to enable us to remove the obstacles, we shall at

least be better prepared to judge in what direction our exertions will be most useful, and to what extent they are likely to succeed. Besides, a knowledge beforehand of what may be expected to occur, together with the fact that the causes of such results are beyond our control, may serve to enable us to regard with contentment and complacency what might have been otherwise felt as a disappointment.

Foremost amongst the causes of the slow progress of mesmerism, in common with that of other discoveries which extensively subvert anterior canons of belief, is the circumstance that nature, in accordance with her design—that the majority of mankind should lead a life of action—has bestowed on the great bulk a strong tendency to carry out and act upon the ideas acquired in youth, and an equally great indisposition to modify and reconsider them. To use a comparison of Carlyle's, the clay once so plastic becomes too hard-baked to be moulded into any other form; and the same individuals who received without questioning, and adopted without examination, all the doctrines of their teachers in early life, will at thirty and forty at once reject with scorn and ridicule irresistible inferences from facts, for no other cause than because contrary to these early precepts; the grounds of their implicit faith in which, they have never thought of investigating and are unable to justify. Low in the scale of intelligence as it necessarily places them, it is nevertheless true, that the great majority of the opponents of mesmerism have no better ground to assign for their disbelief. Mere passive recipients and transmitters of the opinions of the teachers of their youth,—they believe *because* they were so taught, and disbelieve a novelty *because* contrary to this belief. Like lower animals, they are the creatures of instinct rather than reason, and the cause of this defect, which dooms them to an almost total incapability of forming a correct judgment on novel questions, is to be found in the large predominance in their heads of the organs of the feelings over those of the intellect. It is natural to all men to be most disposed to believe what is most in accordance and best harmonizes with their previous belief, and *vice versa*; and where the intellect is feeble, or, if not absolutely feeble, associated with disproportionately powerful feelings, new heterodox truths are never appreciated by it with sufficient force and clearness to overcome this natural tendency to their rejection. Little success can be expected to attend any endeavour to convert parties so constituted. Labour is thrown away upon them, and we must be content to leave them to themselves, hugging the chains in which their own prejudices have bound them, and

remaining stationary, whilst everything around is progressing, till nature in her due course replaces them by a new generation.

To preserve through life a mind constantly open to the teachings of nature—a capacity to weigh and examine on its own merits all evidence that comes before it, and form a purely intellectual decision, unfettered and unbiassed by feelings which reverence and cleave to the dogmas of the day and the prejudices of education, is perhaps the rarest of all mental endowments.

Nature assigns to few the elevated post of advancing the boundaries of human knowledge by their discoveries, and is scarcely more prodigal in bestowing those organizations which, combining good intellectual with high moral endowments, urge forth their possessors to the no less dignified task of leading the crusade of truth against the intrenchments of error, deaf to the petty calls of self-interest and expediency, and unmoved alike by the envenomed shafts of slander or the lighter artillery of ridicule.

Many—too many whose intellect is sufficient to grasp the truth—love the safety to be obtained by siding with the majority, and barter a clear conscience and the interests of humanity in exchange for present profit and professional reputation. And then it is so philosophical to doubt—so indicative of strength of mind. Can they by any other means half so cheaply procure a *reputation* for wisdom? And cannot the reputation without the substance *be turned to more account* than the substance without the reputation? In this age of the worship of shams, the cardinal principle of whose morality is that the first duty of a man is to take care of himself, meaning thereby to fill his purse, all sorts of hypocrisies and deceptions have so effectually banded themselves together to keep one another in countenance, and bad education and example have so led men on the road of self-deception, that they appear to adopt the most absorbing selfishness as their rule of conduct, not only without self-reproach but with self-laudation.

Although it may appear almost a truism to state that, when evidence, superabundant in quantity, decisive in tendency, and unexceptionable in character, establishing certain conclusions, exists, their rejection proves a mental *defect*; and all will admit that, when *adequate* evidence is set before a rightly constituted mind, conviction follows as a necessary consequence, and belief or disbelief is no longer a matter of doubt or choice. Many circumstances have combined to prevent this great and influential cause of scepticism from being

so clearly recognized as it deserves. Foremost amongst these is the imperfect diffusion of the knowledge of cerebral physiology, leading the public to blend together and confound under the general and vague denomination of a clever man various distinct kinds of intellectual capacity, instead of analyzing different species of endowments and discriminating the widely different mental powers required for each. It is not yet sufficiently well recognized that good abilities for one pursuit are often associated with an almost total incapacity for successfully prosecuting studies of a different character; and, consequently, that men with a deservedly scientific reputation in some departments are not only often no authorities on others, but that it may be difficult to find amongst the most illiterate any whose judgment would be of less value.

Besides, so extreme is the subdivision of labour at present amongst our cultivators of science, that the most mediocre intellect, if he be ambitious of figuring in their ranks, and possess leisure to devote to this object, need not despair of success, but may, by counting and chronicling the spots on wings of butterflies, or the number of stamens of a flower, or by dint of translating, editing, compiling, &c., achieve for his name a notoriety which for the day and hour shall cheat the public out of reverence and throw into the shade that of some less bustling contemporary whose original mind, imparting new light to every subject it approaches, shall cause the name of its possessor to live in a futurity as long as that of one of the chosen few who have imparted new *principles* to science.

The pursuit of science, however, holds out too few external advantages to its followers to induce me to wish to say a syllable in disparagement of those who seek to make a reputation by cultivating the humblest of its walks, for such an ambition is a thousand fold more worthy of a rational being than the objects to which the great majority of mankind devote themselves. But at the same time when we hear and see names having no claims to deference paraded as authorities against mesmerism, and made stumbling blocks to the public, we should be neglecting our duty, did we not attempt to expose the delusion and show the emptiness and worthlessness of many scientific reputations.

It is not difficult to conceive that men who achieve scientific reputations by becoming mere observers of facts in paths *struck out by others*, and often by the expenditure of much less intellect and industry than would suffice for successfully conducting a mercantile establishment, may yet be greatly wanting in those higher faculties of reason and imagination

which bestow penetration and profundity and the power of forming conceptions not limited by the narrow field of previous observation. Minds thus mutilated by nature make their own experience the criterion of the *possible*, and cannot raise their vision to that point of view from which the causes of wonder are clearly seen to be only relative.

That man should have a faculty which gives him perceptions of objects at millions of miles distance does not astonish them at all, and passes as a matter of course upon which they never reflect; but, that a patient in the mesmeric trance should, by some occult power not called into play in the natural state, be able to describe what is passing in an adjoining apartment separated by a wall a foot thick, is pronounced to be not only quite incredible, but an absolute impossibility. Thus is ignorance ever ready with dogmatical assertions on points the very conditions for forming a correct judgment on which are beyond its comprehension, instead of perceiving that it does not possess the materials necessary for the purpose. When man can satisfactorily demonstrate that he is acquainted with every property of matter, then, but not before, will be the time for pronouncing opinions as to the possibility of living beings acquiring ideas of external objects in some other way than the usual-avenues of sense. Meanwhile one single recorded fact should weigh more with us in forming our judgment than the united dicta of a hundred smatterers in science; the very circumstance of whose having presumed to give an opinion on the question of possibility is quite sufficient to show their incapacity for the consideration of the subject. Ignorance and presumption, however, go hand in hand; and so completely are these parties blinded to the ridiculous figure their dogmatic assertions present in the eyes of all persons capable of estimating their real value, that, finding themselves unable to allege any reasons in their support, they adopt the usual resource of obstinate people and reassert and affirm, with a pertinacity proportionate to their lack of arguments. In fact it might be supposed they were ambitious of the reputation of lunacy, for, consistent in folly, they loudly proclaim that rather than admit the fallability of their judgment, they would reject the evidence of their own senses.

Self-Esteem contributes in adults to the rejection of mesmerism in common with other novelties, by imbuing the mind with a sense of self-sufficiency, which indisposes it from condescending to accept the position of a learner; and Love of the Past and Veneration, by clinging to and reverencing early associations, the dicta of teachers, &c.

The influence of these feelings in retarding the reception of mesmerism is, as might be expected, very much greater amongst the medical profession than with the public at large, the latter not being afflicted with that pride of knowledge, to struggle against the abnegation of which in the position of a scholar is so difficult and unpalatable to self-love. It might be supposed that upon the announcement of a new truth it would be first received by those whose previous study of the science to which it referred should constitute them the best judges of its value; and that such would be the case, were our judgments dependent upon intellect alone, is self-evident. But history teaches us that precisely the contrary has always taken place; and the fact certainly presents a painful and humiliating picture of human nature. There was, however, a circumstance which might have excited the hope that the reception of mesmerism by medical physiologists would have formed a pleasing exception to this general rule, a clean spot on a dirty page, viz., the fact that all the phenomena produced by mesmeric processes are occasionally evolved spontaneously during disease; and possibly it would not have been without its effect, but for the circumstance that the new agent promised to cure disease with greater certainty and rapidity than medicine. This was a heresy altogether unpardonable, and treated accordingly; and, greatly as it is to their discredit as a body, it is nevertheless the truth, that the medical profession are the worst authorities that can be applied to on the subject of mesmerism.

Another species of mental defect operating to retard the progress of mesmerism is one which has hitherto almost escaped observation. Accident rather than reasoning first revealed its existence, and since this period my opinion of its frequency and influence has been constantly on the increase. In discussing one day the subject of mesmerism, my attention was arrested by the very little store our opponent seemed to place on the value of testimony. His mind seemed instantly to dispose of any quantity of it, not from being able to trace or imagine any avenue for mistake or self-deception, but by the suggestion of bad faith on the part of the narrator.

When the conclusiveness of any testimony was urged upon him, and he was called upon for his objections, his invariable reply would be, with an emphasis that showed he felt his query to be most cogent and appropriate,—How do we know this man has stated the truth and not been trying to humbug us? No matter how numerous the cases might be attested, or how unexceptionable the character and distinguished the attainments of the witnesses, or how completely every atten-

dant circumstance conspired to imprint authenticity on the statement,—nothing made an impression.

Now, although perfectly ready to admit that several circumstances may often combine to produce scepticism to testimony, I nevertheless believe that the most frequent and influential cause of a low estimate of the veracity of others is a low sense of the incumbency of truthfulness in the individual himself, arising from a deficient development of the organ of Conscientiousness. Persons with this unfortunate organization are apt too readily to suppose that a little love of notoriety, or self-interest, or a morbid desire of deceiving, or as it is termed humbugging, others, is sufficient to induce a man to forge and propagate the grossest falsehoods. Such parties deem themselves wise in their generation, and pride themselves upon their acuteness and insight into human nature; but the fact is, none make such gross blunders in estimating motives and character when the object of their observation happens to be an honest truth-loving man, a phenomenon quite beyond their comprehension, and generally ultimately referred by them after some little perplexity to the genus fool.

Many afflicted with this moral blindness, whose intellect is sufficiently penetrating to ensure their reception of mesmerism were they eye witnesses of its phenomena, remain all their lives in ignorance, unless accident throws it in their way, from testimony failing to give them such an opinion of its probability as would lead them to enquire into its merits. For men cannot devote time to the consideration of every novelty which presents itself, and rarely commence the task of examination, except in the case of an object of whose truth they previously consider a strong presumption exists.

After having passed in review the various mental defects which render individuals blind to the truth of mesmerism, I shall conclude with a brief notice of those which induce a concealment or denial of belief, the great source of which is palpably a deficient conscientiousness, allowing itself to be overpowered by fear of ridicule or loss of caste on the one hand, or fear of pecuniary loss on the other; and, while we contemplate the degree of concealment, falsehood, and self-debasement required to keep up such a deception, we forget, in the comparison, the limited intellect and dense prejudices of one class of disbelievers, and the unfortunate cause which perpetuates the scepticism of the other, and remember only that the former may be honest men, and the latter unsoiled

by the meanness and cowardice of habitual hypocrisy and truckling to the opinions of others.

The extent to which the progress of mesmerism is retarded by this unprincipled suppression of belief can scarcely be overestimated, thousands being fortified in their prejudices and scepticism by supposing themselves supported by the authority of some favourite medical attendant, who in reality is fully convinced of its truth, but deceives them as to his opinions; and such is the morality of the day, that such *lâches* are looked upon not only without reprobation, but applauded as prudential.

This laxity of public opinion, that appears scarcely to recognize that it is the duty of man to pay homage to truth, is a grave evil, since that powerful and necessary incentive to inferior minds to act rightly—the fear of incurring public odium—is no longer enlisted on the side of virtue; and not only is this restraint withdrawn, but, on the contrary, breaches of duty not discountenanced by society receive a species of sanction that deludes many into the belief of their allowableness and confounds all distinctions of right and wrong. As long as wealth rather than truth is the object of our worship, and success in obtaining it allowed to gild over the mean and dirty paths by which it has been won; as long as the profession of faith in sundry dogmas and the practice of certain external rites of worship shall be deemed to extenuate a neglect and infringement of our duty to truth and our fellow man, at which heathens might blush; so long must the age expect to pay the penalty of its own soul-debasing principles, in the utter prostration of everything which is most noble and dignified in man.

The whole duty of man, as taught by the precept and example of their elders to the rising generation, in the year of grace, 1846, may be thus summed up.

Go to church, because this is respectable. Infringe no law, because this will make you amenable to punishment; but, whenever you can with safety, make self-interest paramount to all other considerations.

Trouble not yourselves to ascertain what is true, but carefully study what is popular.

Thus shall you glide down the stream of life easily, with a decent reputation, and avoid the rocks and shoals upon which those impracticable blockheads who attempt to stem the current for the sake of some truth are perpetually getting stranded.

Such principles produce their natural fruits, and we find

the mass exhibiting in their daily conduct such an all-pervading, unmitigated selfishness and disregard for the rights and welfare of others, that we are lost in astonishment, how at the same time they can practise so complete a self-deception as to style and regard themselves the followers of a system of morality, of which the injunction, "do as you would be done by," constitutes the corner stone. Indeed, when we compare their actions with their professions, and call to mind the assumption of piety and sanctimoniousness made by many, we are almost tempted to conclude that they consider the avowal of belief in a creed privileges them to omit the practice of the precepts it enjoins.

Contaminated by the insidious morality of the day, the medical profession are only on a par with their neighbours in the unprincipled line of conduct they have pursued with reference to mesmerism. A friend of mine once asked a surgeon of celebrity, whom he knew to be a believer in mesmerism, whether he was going to ——'s house, to witness an operation on a patient in the mesmeric sleep,—when the individual addressed, with surprise depicted in his visage that his interlocuter should think him capable of such folly, almost indignantly exclaimed, "Do you suppose I'd allow my name to be connected with mesmerism?" So sensitive to anything which could be construed into an imputation on his prudence—so unconscious of there being anything derogatory to his character in suppressing his belief! This individual may be taken as the type of a class, and I fear a large one, with whose existence the public cannot be too fully made acquainted, if we would hasten the advent of the day—when the community at large will reap the inestimable benefit of the free, unrestricted, and general use of mesmerism as a remedy for disease—when no surgeon will dare to propose to perform a severe operation without first trying to procure for his patient immunity from pain by the mesmeric process—and when those unfortunate wretches who now make up their minds to death as an alternative preferable to the terrors of the knife, will, wrapt in a total oblivion, pass through the no-longer dreaded ordeal, and only be restored to consciousness to receive the congratulations of their friends.

Such is the criminality of those who, against their better knowledge, hesitate not, for paltry considerations of professional emolument, to contribute their quota as individuals to delay the universal acceptance of this great truth; careless if by so doing they consign to sickness, suffering, and a premature grave, thousands of their fellow creatures who might have found in mesmerism an alleviation and cure for their

maladies. Let them *weigh* the awful responsibility they incur and consider whether such conduct will form a pleasing retrospect at the close of their career.

Which is the baser character, the man who robs another of a purse on the high road—or the medical practitioner who, having exhausted the Pharmacopœia in vain, calmly watches a patient sinking into the tomb from some affection which he believes in the privacy of his own thoughts there is a strong presumption that mesmerism would cure, and yet will not recommend its employment.

Would that such cases were rare instead of being, as there is every reason to fear at the present moment, of almost daily occurrence, whilst the perpetrators of these crimes against humanity pass as honourable men and are by none less suspected than by the unfortunate victims whose confidence they so cruelly abuse. Contriving by a judicious worship of every respectable humbug of the day to stand well with the world, they present to us a living genus of that class to whom a great teacher and reformer of ancient days addressed the following denunciation,—“Woe unto you Scribes and Pharisees, hypocrites! for ye pay tithe of mint and anise and cummin, and have omitted the weightier matters of the law, judgment, mercy, and faith.”

Lest it should be supposed that we have exaggerated the timidity or misrepresented the opinions and motives of the medical profession in reference to mesmerism, we quote the following extract from a letter addressed by Dr. Carpenter to the *Medical Times*. “I may commence by remarking that there is a very natural dislike, on the part of medical men—on whom, as a branch of physiology, this subject has a natural claim for attention, to enter upon an examination of it. So long as public opinion is such, that to uphold mesmerism is to expose oneself to the imputation of being either credulous or unprincipled, it cannot be expected that those who depend for their livelihood on the estimation in which they are held, should be very ready to place themselves in the way of thus ‘losing caste’ among their brethren and the public. A highly respectable physician, to whom I had applied for information as to the character of Mr. Brookes, thus writes to me:—‘I sincerely rejoice that the subject is likely to be taken up in Bristol, because I wish to see it in good hands, and really have the expectation of obtaining practical results from it. But, for my own part, I cannot afford to play with my children’s prospects; and have, therefore, limited myself to a few trials of its efficacy in nervous and spasmodic diseases only. In some

of them it has been of use, but *how*, I am as ignorant as every other person appears to be." Another physician in a position of high eminence and influence in London, thus writes to me:—"If you and a few more philosophical doubters will investigate the thing in *private* and thoroughly, you will do great service to science." "I believe" resumes Dr. Carpenter "that there exists in the mind of nearly every medical man who has fairly and impartially examined the evidence in its behalf, a general desire that this evidence should be fully enquired into; but unfortunately from the cause I have named, *there has been an individual indisposition to do so.*"

We are delighted to take an opportunity of placing such a candid avowal before the public, convinced that the interests of truth and the cause of humanity are alike served by such facts becoming generally known. Dr. Carpenter cannot be deemed an unfavourable specimen of his class, and appears, from the circumstance of his having published such a letter, to be possessed of too much self-respect to conceal his own opinions; but can we estimate too highly the pernicious influence of bad example, and the lax morality of the day, when a man of his superior attainments, and one whose writings are often pervaded with strains of piety and religious admonition to an extent which, though very edifying, many deem out of keeping in works of science, can palliate and excuse, almost justify and commend, the suppression of an acknowledgment of truth, because its avowal might injure the pockets of the individual.

For ourselves we view with the utmost apprehension and disgust all attempts to defend a compromise between interest and duty; believing that if it be once deemed allowable to depart from absolute rectitude as a rule of conduct, man, deprived of any fixed point to steer by, becomes an easy prey to the specious but fatal logic which teaches that the end justifies the means. To admit the dangerous doctrine that duty may be sacrificed to interest, is to step on an inclined plane of ice the foot of which reaches to the lowest point of degradation of which human nature is susceptible. In my estimation, the medical practitioner who, believing in the utility of mesmerism, neglects to employ it for his patients from selfish motives, is a rogue, and guilty of what is a great aggravation of all criminal acts, a breach of confidence. Let those who will, quarrel with the appellation. I would rather by calling things by their right names deter men from evil deeds than, by glossing them over in words indistinct and equivocal, pave the way for their commission; deeming that those, who by such phraseology succeed in depriving crime of a portion of its repulsiveness, become accessories to its committal.

I have now completed my task of giving an outline of the principal classes of our opponents, and the mental peculiarities to which their opposition must be referred. There remain a small body, who, though deserving to be so designated, would perhaps protest against such a proceeding, but whom I must not forget to enumerate. I allude to the trimmers, who, uniting the want of conscientiousness of the last class with greater intellect, foresight, and cunning, attempt to overreach the public and stand well with all parties.

These men, concealing their motives under a well assumed mantle of philosophical caution, would at one and the same time escape the risk of avowing an unpopular truth, and reserve to themselves the power of changing sides, whenever policy may render such a course desirable, with the self-glorifying announcement—"we have never denied its truth."

Taking up the eminently safe position of denying nothing to be possible, and admitting nothing as proved—making large professions of candour at the same time that they are distorting facts and endeavouring by ungenerous implications to destroy character, they wish to seize all the present popularity and pecuniary advantages to be gained by siding with and advocating the cause of the majority, and save their future reputations as men of science when the day of the recognition of its truth arrives.

It has not been my object on the present occasion to adduce facts in support of mesmerism. These exist already in great superabundance for all who have the capacity and inclination to profit by them.

Some we have seen, from a sad deficiency in conscientiousness, debarred by nature from ever being able to form a correct estimate of the value of testimony.

Others are afflicted with such an unfortunate drowsiness and imbecility of intellect, such an incapacity of grasping necessary consequences, that they cannot perceive the necessity of admitting conclusions when the facts from which these are the irresistible deductions cannot be gainsayed. But, whenever the balance of probabilities is struck by a mind competent to the task, the truth of mesmerism is seen to be a thousand fold the most probable solution of the problem.

That thousands of honest and truth-loving individuals should, in different countries and at different periods, without plan or concert, unite in endeavouring to deceive their fellow men by solemnly asseverating the grossest falsehoods, not only without any intelligible motive, but often manifestly to their own disadvantage, is a proposition so utterly at variance with all known laws of human action, that it only requires to be stated to have its absurdity revealed.

That in all the numerously attested, carefully conducted, and a thousand times corroborated, mesmeric experiments on record, the operators and spectators have been deceived by their own senses—simultaneously the victims of a delusion—is a supposition which if any man adopt as a more probable solution of the question than the admission of the facts recorded, all that can be said is, that he has been hopelessly doomed by nature to remain a fool.

Just in proportion to a man's own truthfulness will be his disposition (other conditions being equal) to rely upon the testimony of his fellow men.

And just in proportion as he possesses a capacious, profound, and penetrating intellect, will he rise above that shallowness which, seeing nothing wonderful in the familiar, finds the impossible in what is strange, and will the difficulty of conceiving the existence of mesmeric phenomena vanish, and will the disbelief in their possibility appear puerile.

I hesitate not in the slightest degree to record my conviction, that no man of decidedly superior moral and intellectual endowments can examine the subject of mesmerism without being convinced of its truth.

With arguments so triumphant, and a case so clear, I shall be asked, why is not the belief in mesmerism more extensive. I reply—*because the apathetic class of mankind is so numerous,—those of whom it can scarcely be said that they embrace a new truth as an act of judgment and volition, so much as that they allow it to be hammered into them by repeated blows.*

X. P.

II. Three Cures of Epilepsy. By Dr. STORER, of Bath.

"People are as free to believe in repeal as in mesmerism. It is treated as a dream, which concerns none but the dreamer."—Mr. ALBANY FONBLANQUE, *Examiner*, Nov. 29, 1846. p. 754.*

TO THE EDITOR OF THE ZOIST.

SIR,—In forwarding the enclosed cases, I must remark that next in importance to surgical operations without pain, of

* Mr. Albany W. Fonblanque surely knows that believers in mesmerism are so "free" that they are vilified in all the English medical journals, and by a host of physicians and surgeons, and newspaper and magazine writers, who, like himself, are totally ignorant of the subject. Surely too, when cases previously rebellious to art are cured, and torturing operations are rendered painless, some others are concerned as well as the dreaming mesmerists who effect these blessings.—*Zoist*.

which your journal affords abundant examples, stands perhaps the cure of epilepsy, so truly distressing to patients and their friends. The long continuance of the attacks, the thorough incapability of pursuing regular employment, and the extreme uncertainty of any known medical means in the shape of medicines, are too well known to need comment. I will not pretend that mesmerism is a specific in epileptic cases, but I do say that what it has already accomplished should at least open the eyes of the medical public and procure it a still greater trial.

Yours obediently,
HENRY STORER, M.D.

27, Brock Street, Bath.
December, 1846.

Case I.—Charlotte Pearson, 23 years of age, residing at 33, Milk Street, Bath, was sent to me in March, 1845, by General White, a gentleman who takes great interest in mesmerism. The account I received from her mother was, that she had suffered from fits for the last three or four years,—that they occurred as frequently as five or six times a week, sometimes as often as to this amount in one day, and so violently that she required two or three persons to hold her; and that she had frequently injured herself during the attacks by falling suddenly against the wall, down the stairs, or into the fire-place.

Up to the very time of my seeing her, she had continued to have these fits. The last was a most severe one, and her fall greatly bruised her face and temple. She had been under the care of a great many medical men; amongst others, the late Dr. Barlow, *who pronounced her case incurable*: and so extreme did I regard it, that I told her friends I could only hope to relieve.

From this period I mesmerised her daily for three weeks, and afterwards three times a week for the same time, *together about six weeks*. The results have been as follow. During the first fortnight the fits were as frequent as previously, but *not so severe*. After the first fortnight they gradually *diminished in number and became much less violent*. This state of improvement continued until the end of the month. Since that period she has had NO RETURN, NOW ABOVE A YEAR AND A HALF. Her general health is much improved, bodily and *intellectually*; for she was becoming fatuitous. The contrast in her daily pursuits is striking and gratifying. Her mother is a charwoman, and was frequently obliged to give up two or three days a week to attend on her. The mother

has since become infirm, and the daughter is now able to go out and earn her own living, and to assist towards the support of her mother.

In the treatment of this case, simple sleep only was produced or sought for. She would remain for a long time quite passive, but could easily be aroused. The only marked sensible effect in her case, was the state of sleep or quiescence which followed during the day. She has been seen here by several parties who have kindly interested themselves in her behalf, and the results in all respects have afforded the most satisfactory evidence of the good accomplished.

II.—Master Chapman, aged 13, was brought to me by his mother, residing at Primrose Hill, Bath, February 5, 1846. She stated that he had suffered from fits (apparently epileptic), more or less, for the last three years; that the attacks had sometimes continued for many months together, and sometimes returned with little intermission during a whole day, though not so frequently at present, but still he generally had three or four attacks daily; and that he had been under the care of several medical men of Bath, amongst others the late Dr. Barlow, *by whom and as well as by the rest, his case had been pronounced hopeless.*

Previously to his being brought to me, he had been seen by Dr. Carter of Bath, who adopted mesmerism in his case for about three weeks; but as that gentleman soon afterwards left the place, the treatment was given up.

Just before my being consulted, I was informed that he had several fits, though not quite so severe. I mesmerised him daily for the first fortnight, then three times a week for about two months, and then only twice a week for a month. He continued to improve rapidly; and has had *no return whatever of his fits.* During the excessive heat of this summer, he complained of faintness, but this feeling was soon removed by mesmerising him; and I occasionally mesmerised him during the warm weather.

There were some peculiarities in this youth's case. At first, when mesmerised, he was quite taciturn; after a short period he became so loquacious that it was with difficulty he could be restrained. He was at times perfectly insensible to pain, so much so, that he had a tooth extracted without sensation, as reported in your last number but one, p. 214; at other times he was so highly sensitive as to be impressible by every external circumstance. He was also at times perfectly clairvoyant. His case was witnessed by a great number of individuals here, and, after the most rigid testing, they

have been perfectly satisfied with the reality of the phenomena.

The states of catalepsy and rigidity also varied in this case, sometimes the one, sometimes the other, being extremely well developed.

The most important point in the case, however, is the COMPLETE CESSATION *of the fits*, and the general improvement, *bodily and intellectually*, which has taken place. So great is this improvement, that he has resumed his school studies, which for three years had been completely interrupted.

III.—As a sequel to these cases, I will now add the outlines of one, which, for the good accomplished, ought to rivet the attention of every conscientious practitioner.

A respectable mechanic, a printer, was seized with epileptic fits about three years since. They continued so long and violently as to compel him to leave his occupation; and himself, his wife, and three children, were obliged to live on three shillings a week received from the Bristol Union. About this period, Mr. Lundie, a lecturer on mesmerism, sought out some extreme cases, and amongst others found that of this poor man, and mesmerised him for about a month. The patient was afterwards occasionally mesmerised by a volunteer, and by myself; and the effects were most striking.

For the last eighteen months he has had NO RETURN whatever of his fits; and, instead of being the recipient of three shillings a week from the Union, he has been enabled to earn for the last eighteen months eighteen shillings a week in an iron factory.

I should not report this case, as the patient was not my own, but that I can vouch for every particular.

. How can Mr. Wakley and his coadjutor Dr. Marshall Hall, Sir Benjamin Brodie, Dr. George Burrows, Dr. Chambers, &c., find it in their hearts to read such facts as these and continue to do all in their power to make the world despise mesmerism!—*Zoist*.

III. *Cure of Dumbness of seven years and a half standing, with great improvement of Intellect and Health, by Mr. DAVEY, Bideford, Devon. Communicated from Mr. HARRISON, jun., of Plymouth, to Dr. ELLIOTSON; with Remarks by the latter.*

"The miracles and signs that distinguish these unclean spirits, the spirits never let it be forgotten of devils, are becoming more and more manifest. Miss Martineau's letters sufficiently develop the character of mesmerism. I am compelled by such and similar statements, to view it as possible that a supernatural, and therefore diabolical, power may be engaged in producing some of its wonders, and I would not for any supposed benefit whatever have any thing to do with it. We may expect to hear more and more of such claims to miracles, and to witness really supernatural and diabolical powers from these unclean spirits. That they should come first in a healing form, as a mockery of our Saviour's miracles of love, was to be expected from him who can transform himself into an angel of light, that he may maintain his hateful tyranny."—*The Signs of the Times in the East, a Warning to the West*, by the Rev. E. BICKERSTETH, Rector of Watton, Herts. p. 108.

MISS ISSELL, on the 20th of November or December, 1839, while returning from a place of worship, was struck to the ground by lightning. The shock rendered her dumb, with the exception of the ability to say "yes" or "no" by a very great effort, and by taking a deep inspiration. She was confined to her bed and sofa for about ten weeks.

Medical aid was employed, but to little or no purpose.

As soon as she could be removed, she was taken to Plymouth to consult one of the *first medical men* there, who, *before the mother had time to finish her account of the case, pronounced the poor girl to be an impostor.* He was so angry as to *swear*, and told her to go home, saying she could speak if she would, and that it was her wickedness and craft that made her seem dumb. There is a man there who has treated other patients in the same way. Notwithstanding this ignorant and cruel medical opinion of this "one of the first medical men in Plymouth," she grew worse and worse. Her intellect deteriorated so much, that she could no longer write her own name or calculate any numbers, and she could not be trusted out by herself. Her sleep became so unsound, that after the accident no one ever saw her asleep; whenever her mother stole into her bed-room, she was always awake, the slightest sound rousing her, I presume, as it does a bird. She lost her appetite, and her strength declined; her extremities became cold and her pulse feeble.

She was placed under Mr. Davey's mesmerisation on the 11th of March, 1846, at Dartmouth, where he had been lecturing; and after her cure she was removed from thence to Plymouth, and brought forward at his lectures as a proof of the efficacy of mesmerism in such cases. She remained in his family about ten weeks.

It took Mr. Davey fifteen days to produce sleep. From

this time—after the first mesmeric sleep—her health improved, she began to grow strong and look well, to sleep soundly, to eat well; she recovered her intellect, and she began to speak intelligibly: and in *three months* after mesmerism was begun, *she was married*, at St. Andrew's Church, Plymouth, by the vicar, the Rev. John Hatchard, to Mr. Stabb, to whom she had been engaged before she was struck with lightning; *but her distressing state had for seven years and a half prevented the marriage.*

I am happy to give the testimonial of a clergyman, not of the diabolic school of philosophy:

"The Rev. Robert A. Knot has much pleasure in informing Mr. Davey that he has seen Mrs. Stabb, formerly Susan Issel, since her return from Plymouth, and has heard her repeat the Lord's Prayer and several other words; when, although her articulation was not quite perfect, she manifested a very decided improvement in her power of speech, not having been able during the time that Mr. Knot had previously known her to make even an attempt to pronounce more than the monosyllables 'yes' and 'no.'

" Vicarage, Stokenham,
 " To Mr. Wm. Davey, Lecturer, July 6, 1846.
 " New Street, Bideford."

Newport Street, Tiverton.

Mr. Harrison's last letter to me was dated Sept. 17th. I have just written to Mr. and Mrs. Stabb, for information as to her present condition, and in an answer, dated Dec. 8th, Mr. Stabb says that "she has plenty of words, and can speak of herself, by the power of mesmerism and the assistance of Almighty God." "I am very happy to write," he continues, "to convince all who are opposed to the powers of mesmerism and write to me on the subject. I take it a great pleasure, Sir. I know not whether you are opposed to mesmerism or not, but I can assure," &c.

In her mesmeric sleep she spoke, and exhibited in a most beautiful manner the excitement of many cerebral organs—Tune, Wit, Number, and Sense of Things.

"One of the first medical men" in Plymouth, who swore at this afflicted girl and off-hand pronounced her an impostor, did only as too many of his brethren, often through their la-

mentable ignorance of the phenomena and existence of a curious class of nervous diseases, are in the habit of doing when speaking of such cases, and especially when consulted on them and not likely to obtain much profit by them, as in this instance, or, after having made a good profit, and tried all things, even the most painful and distressing, except the proper remedy, they find they have done no good. Thus the two Okeys, who were cured of severe epilepsy many years ago, and are alive and well, were pitilessly called by Mr. Wakley impostors. Thus the young lady who had laboured under chorea and distressing spasm for years, as detailed in my Pamphlet,^b was so pronounced by Dr. Marshall Hall. After having cupped her every five days, and given her mercury till not a tooth is left sound in her head, he, as soon as he heard that mesmerism was being tried in her case, declared himself perfectly certain that the disease was feigned. Unfortunately three years more have elapsed, and her condition is, as I always predicted to her mesmeriser, as bad as before. Had she recovered, she might have been married. One was ready to espouse her, and she him: but all was hopeless, and he is married to another. Mighty reasons had she, and has she, to feign! Miss Issell had as good reason to feign. She was engaged; but, through her illness, the marriage was delayed for nearly eight years: and, as soon as ever mesmerism put an end to it, she and her lover were united. If the exciting cause of her loss of speech was not evident and sufficient, if the bad state of her intellect and general health was not evident and sufficient, to prove her no impostor; the delay of the marriage, to which no other obstacle existed, for nearly eight years, ought to be proof enough of reality. I never heard of a woman who, when devoted to a man, all anxious for the marriage, chose for no reason upon earth to live ununited till she was seven or eight years further advanced in womanhood. The young man of Tinsbury, whose beautiful case of sleep-waking was recorded by an able physician in the Transactions of the Royal Society, a hundred and fifty years ago, and whose case was only like endless others recorded in books and seen by all persons of extensive practice, respecting the genuineness of which no well-informed physician can entertain a shadow of doubt, as I have pointed out at full length in my Pamphlet, into which the whole is extracted, was as boldly as ignorantly pronounced by Sir Benjamin Brodie in the Medical and Chirurgical Society an impostor; and, without any notice of the ample proofs I gave of the genuine-

^b *Numerous Cases of Surgical Operations without pain in the Mesmeric State*, p. 86, sq.

ness of the case,^c has been lately with the same ignorance and boldness so pronounced by him a second time.

Here I must fulfil a promise which I made to Dr. Todd of King's College in the summer. We met at a ball, of all parties in the world, in Eaton Square. He said that he had to complain of me for having stated in *The Zoist* (No. III.) that the deaf and dumb boy, whom I represented to have been cured by mesmerism, after he had been treated for some time in vain in King's College Hospital, was thought an impostor by him: that he had never thought the case to be one of imposition, and had taken great interest in it and pointed it out to the pupils. I replied that whenever I found myself to have made an erroneous statement respecting any person, or to have held a wrong opinion on any point, I would make a point of retracting; and that I would declare in *The Zoist* that, notwithstanding the boy had assured me that he was throughout treated as an impostor in King's College Hospital, and been made game of by physicians and pupils, Dr. Todd had never for an instant thought him an impostor. But I added that the boy was watched narrowly by myself and others in my house, and satisfied us that he spoke the truth whenever we could judge of what he said; and that I had found the humbler classes just as truthful, just as honest, just as charitable, just as virtuous in all respects as those above them: that I had the additional reason for believing his assertion that Dr. Todd, like Dr. Budd and Dr. Guy, and the rest, considered him to be an impostor, because Dr. Todd treated him as an impostor. "Oh yes," replied Dr. Todd, "we put him to all kinds of tests—some of them pretty severe ones I assure you: he was pumped upon, blistered, and had a number of severe things done which I forget."^d "What," rejoined I, "you never doubted the reality of his case, and yet you treated him with severity as an impostor!"

I have now fulfilled my promise; but fancy it would have been better for us to have believed that Dr. Todd mistakingly thought him an impostor, than that Dr. Todd treated him as an impostor without ever thinking he was one.—After all I did not once, either in No. III. or No. XIV., say that Dr. Todd had thought him an impostor. My words were that he was "treated as an impostor by Dr. Todd and others,"^e and this it appears on Dr. Todd's acknowledgment

^c *Numerous Cases, &c.*, p. 45, sq. I entreat every one, who cannot think Sir Benjamin Brodie would so commit himself, to read my account.

^d Such as thrusting pins into him, burning him with hot spoons, &c., Vol. I., p. 341.

^e No. XIV., p. 167.

was the truth. All this I recorded in *The Zoist* for October, 1843, p. 340. See also July, 1846, p. 167.

Dr. Todd then added that mesmerism had not cured him :^f that he would have got well by nature at last. This is what we are always told by our opponents when we effect a cure. But why did not the patients get well under our opponents, who had all the opportunity they could desire of putting all their useless plans into execution. It is strange that nature should be so fond of us mesmerists, that, after baffling the doctors tied *ancien avis au bon ou au mauvais*, as the presiding doctor says in Molière, she so often cures the patients either as soon as we take them in hand, or allows the cure to begin to shew itself soon after we begin. If ever patient was cured by art, this boy was by mesmerism. For not only were full and numerous mesmeric effects produced, but, finding that I could produce great pain during his mesmeric state in the palsied parts by pointing my fingers on them, I at length one day, having an hour or two to spare, resolved that before he left the house he should, if possible, be cured. I began pointing my fingers in his ears : produced dreadful agony : and he at length heard. I then did the same with the root of his tongue, and at length he spoke. To say that mesmerism did not cure him, is tantamount to saying that when the blacksmith hammers his red-hot iron, he does not fashion it into the shapes it takes. I entreat every medical man who reads this page to read also the passages to which I have referred. Possibly the lad would have recovered his hearing and speech at last. But when? he might have remained deaf and dumb for months—for years—for ever. I have seen palsy of sensation or of motion in various situations after fits remain for life. Miss Issell was dumb and fatuitous too—her intellectual organs palsied—seven years and a half : and lo ! at the end of a fortnight, mesmerism effected the commencement of her cure. Would it be rational to doubt that mesmerism effected her cure? If it would be, then let sleep after opium, and vomiting after ipecacuanha, be doubted and pronounced coincidences and effects of nature ; both which of course they often are when no soporific, no emetic, has been taken, no art employed to induce them.

Dr. Todd remarked to me that it was a very striking case, and that he had pointed it out as such to the students ; that it was an instance of sudden suspension of power in certain nervous parts without any other symptom. I replied

^f This Dr. Todd actually asserted to the boy after I had cured him. Vol. I., p. 347.

that it did not appear to me wonderful, that is, of an uncommon nature; that it was simply an instance of a very common fact, the loss of power of some nervous part after an epileptic fit. Master Salmon lost the use of his legs after a fit,^s and not many months pass without my seeing palsy of sensation or motion in some part or other, or loss of memory, or even fatuity, after a fit: and the loss remains sometimes a few minutes, sometimes days, weeks, months, and sometimes permanently. Dr. Todd assured me he had never heard of the occurrence of any fit in the case. But the diligent investigation which I had made of it disclosed that the palsy of speech and hearing followed a *violent epileptic fit*, that he was taken into the hospital in the coma of this fit, and that *several other epileptic fits* had occurred previously. Indeed afterwards he had an epileptic fit on being frightened at hearing while waiting at table a conversation about deafness, dumbness, and blindness. So imperfectly was Dr. Todd acquainted with the case and its cure.

I beg to mention in reference to two other cases of Mr. Davey, recorded at p. 245, that I am informed that the Christian names of Mr. Bell, the honest surgeon mentioned at p. 244, are Stephen Bamfield Lovering.

In the same page is an account of the wonderfully beneficial effects of mesmerism upon Sarah Nicholls, finishing with these words: "Mr. Bell having left that part of the country, should a relapse again take place, there is no good Samaritan near. *Proh pudor.*" Relapses have taken place, but after none has her speech been lost as formerly was the case. How disgraceful that no neighbouring medical man has condescended to learn the truth of mesmerism. Her friends should be taught to mesmerise her, and after her apparent cure mesmerism should be long continued. The early relinquishment of mesmerism after a cure is often just as injurious as the early relinquishment of medicines and particular diet, &c., after cures effected by them: of quinine after the cure of ague, of mercury after some diseases, and of abstemious diet after the cure of inflammatory affections.

I cannot conclude without alluding to the motto. Its words are those of a clergyman of the Church of England; educated in the University of Cambridge; and brother to Lord Langdale, the Master of the Rolls. "*Supernatural and therefore diabolical!*" According to this, God, being supernatural, must be diabolical: and the devil has turned round and cures all manner of diseases, and thus patients

and their friends are made happy, and grateful patients return thanks both in private and in the churches^b to God, when it should be to the devil. This is the old, superstitious ignorance or malice of the Pharisees, who endeavoured to make the people believe that Christ cured diseases by Beelzebub. Dr. Stubbe, in his work published at Oxford, and quoted by me in Vol. III., p. 99, wisely said a hundred and eighty years ago, "I do not remember that ever the devil did cure a disease, no, not when his glory was concerned in it." I presume that the Rev. Mr. Bickersteth does; but I should be glad to know where such a case is to be found. When we move our material, natural hands downwards before another man's face again and again, the devil is acting! and yet he is not if we turn a cylinder of glass round against silk again and again, and sparks are excited on approaching our knuckles to the electric machine. This clergyman, who mistakes a natural phenomenon for a supernatural one, is empowered to teach the people, and to teach them that Christianity is founded on miraculous or supernatural proofs: he who cannot distinguish the natural from the supernatural, and considers that what is supernatural must be diabolical! Did he know no better when his Bishop ordained him? or has he fallen from his youthful intelligence and attainments? Ought not the Bishop of his diocese to look after his doings? Can he and the party in the church to which he belongs declaim against "the ignorance and superstition of the poor benighted Roman Catholics?"

Another of the evangelico-diabolical school, a Mr. Beamish, a great ally of Mr. Bickersteth and Mr. McNeile, endeavoured to set a most excellent young lady, whom I mesmerised assiduously with great benefit, against both mesmerism and myself, and ended by telling her that she could never ask God's blessing upon what I did. "Yes," replied she honestly and fearlessly, "I can: for I always go to my room before Dr. Elliotson comes and pray to God to bless mesmerism to me." She was too disgusted ever to attend the man's church again with her family.

What will these men say to those of their spiritual brethren who so diligently and kindly mesmerise the suffering: and when I tell them that dignitaries of their church, nay, an archbishop, have often been to see my cases, and have more than once mesmerised in my house: and have performed ex-

^b *Zoist*, No. VI., p. 247. After a remarkable cure of dumbness by Mr. Davey, "thanks were publicly returned" in the "parish church of Ilfracombe, on Sunday last, for the great mercy of God towards the girl, Catherine Brown, on her restoration of speech by mesmerism, through the instrumentality of Mr. Davey."—*North Devon Advertiser*.

cellent cures? Such truly good men, and the three clergymen of the Church of England who have written books in favour of mesmerism, Mr. Wakley, in a recent *Lancet*, elegantly terms *quack parsons*. JOHN ELLIOTSON.

IV. *Speedy cures of various Local Affections.* By MISS WALLACE, of Laurel Lodge, Cheltenham. Communicated by Dr. ELLIOTSON.

"How much more amiable and becoming it would have been if this lady had unceasingly 'minded her knitting,' instead of bothering her brain about such a subtlety as mesmerism. Enough of her. She (Miss Martineau) has gone to mesmerise Mehemet Ali; but I can easily fancy the old file saying, 'Won't do, Miss Martineau! Egyptian darkness has become enlightenment.' Truly this is a quacking and miracle-loving age!" Mr. F. S. GARLICK, Medical Practitioner, 5, Cheapside, Haliifax. Nov. 10, 1846. — *Haliifax Guardian*.

I HAVE received the following cases from Miss Wallace, whose undaunted practice and defence of mesmerism before all the medical and satanical scoffers of her neighbourhood are beyond all praise.

Such cases appear to me of the highest importance. In the first place, they prove that not merely diseases of the nervous system, as is a common case, but inflammatory and other kinds of affections, yield to mesmerism. In the next place, they prove that mankind have a ready help in their own families in numerous accidents and ailments; more ready than lotions and liniments and plasters and leeches usually are, however excellent these may be. Let not medical men say that their well-established methods would have surpassed the easy mesmeric means employed by Miss Wallace.

CASES.

I will now detail the cases in Miss Wallace's own words.

I. *Inflammation of the Eye.*

July 5th, 1846.

Victoria Harmen, aged 8, suffering from an inflamed eye, blood-shot, and having a sty on the eyelid, was cured by mesmerism *in a quarter of an hour*. The sty, the redness, and the pain, which the child compared to running a needle into her eye, had all *entirely disappeared, and the eye in every respect looked and felt as well as the other*. The child was stated by her mother seldom to be free from this malady for a fortnight together, and sometimes it continued several weeks without intermission. So many weeks having elapsed without any return of the complaint, her mother hopes the cure is radical.

We, the undersigned, were present and witnessed the above cure.

2, Pitville Parade, Aug. 27th.

Elizabeth Harmen,
Sarah Tomlins.

II. *Inflammation of the Eye.*

August 1, 1846.

Harriet Gregory was attacked last January with inflammation of the left eye, attended with great pain both in the eye and over the brow. When I first saw her, the eyelids were swollen, the eyeball blood-shot, and *the usual routine of leeching, lotions, fomentations, &c.*, prescribed by Dr. Alerdice and Mr. Hartley, *had failed entirely* in giving her any relief. Dr. Alerdice recommended salivation, to which the patient refused to submit. Harriet Gregory has been unable to remain in service from this severe affliction. When she came to me on the 1st of August, she was suffering under all the symptoms already described. *Half an hour's mesmerising relieved the pain*, but effected no change in the appearance of the eye. On going into the air, she suddenly felt as if a great weight was removed from the forehead, and found she could *bear the light, and look steadily at any object without pain*. She returned to tell me of this decided improvement. The next day, the eye was still red, but the pain had only returned over the eye-brow, and this I removed in a few minutes. I did not see her again for *three* days, when her eye was *quite well*, and she told me the redness and inflammation had *entirely disappeared* in the evening of the day I last mesmerised her.

We, the undersigned, witnessed this cure.

(Signed)

Harriet Gregory,
Sarah Tomlins.

August 5th.

Esther Harington.

The second time I mesmerised Harriet Gregory, I observed a *speck* on the eye, which I privately pointed out to a gentleman present, but did not name to her, as she had not mentioned it. Mrs. Harmer informs me she had shewn this speck to her, and they both saw that it was *entirely gone* after the *third* mesmerising.¹

Elizabeth Harmer.

III. *Tooth-ache.*

August 11th, 1846.

Harriet Haynes, cook to Mrs. Brooke, of the Aviary, came to me suffering from excruciating tooth-ache, which

¹ Compare the cures of inflammation of the eye in Vol. II., p. 239; Vol. III., pp. 25, 32, 324. For the power of mesmerism over inflammation in general, see Vol. III., p. 512, and the remarks in it.

had deprived her of all rest. I entirely removed the pain in a few minutes by mesmerism.

A day or two after, the pain returned from exposure to cold, accompanied by swelling in the cheek, which drew the mouth and eyelids on one side. In a few minutes, the *pain and swelling were entirely gone*, and the mouth and eyelids restored to their usual position.^k

(Signed)

Harriet Haynes,
A. E. Andrews,
A. M. Brooke.

August 28th.

IV. *Severe Head-aches.*

August 17th, 1846.

Elizabeth Wakeley,^l aged 28, suffered from most violent head-aches for ten years, and was in great pain in her head when she came to me, and had a festered breast. I mesmerised her, and she went away in twenty minutes perfectly relieved from all suffering, and remains quite well up to the present time.

Catherine Wakeley, her mark x

As witness, Mary Ann Williams.

August 28th.

V. *Severe Rheumatic Pain.*

August 18th, 1846.

John House, butler to Mrs. Brooke, suffered violent pain in his shoulder from rheumatism; was unable to use his arm or work for two days. I mesmerised him: all pain was removed and the free use of his arm restored in about twenty minutes. The next evening much rain fell, and the pain returned in his knee; but I again succeeded in removing it, and he is now able to do his work.

John House,
A. M. Brooke.

The Aviary, Cheltenham,
August 27th.

VI. *Tooth-ache.*

August 18th, 1846.

Mary Ann Phillips, suffering from distracting tooth-ache, was quite cured by half an hour's mesmeric sleep.

Mary Ann Phillips.

August 27th.

^k Compare Vol. III., p. 514, for a similar rapid cure, by a personage as high in the church as in literature and philosophy.—*J. E.*

^l Mr. Wakley formerly spelt his name thus, like the rest of his Gloucestershire and Somersetshire relations; but we always adopt his present spelling. We have old lists in which his name is so spelt. Why he dashed out the first *e* several years ago we know not.—*Zoist.*

VII. *Severe Pain from a fall.*

August 26th, 1846.

Richard Phillips, living at No. 8, St. James's Street, aged 60, fell from a ladder and hurt the whole left side, particularly the shoulder, so severely, that he could not be moved without suffering agony.

I found him lying on his back, groaning with pain, attended by Mr. Heally, of the hospital, without any good results.

The slightest touch on shoulder, head, or foot, caused such acute suffering, that I was obliged to give up the idea of having him moved off his back as I wished, in order to apply local mesmerism over the injured parts. I therefore proceeded to make long passes from head to foot, and in about twenty minutes he was able to raise, and freely use, his arms, and shortly after he turned on his side, merely taking hold of his wife's hand. I left him free from pain, and the catching that affected his breathing was also removed.

On returning the next day, he met me at the door, expressed his warmest gratitude for *his cure*, and told me that shortly after I left him he was able to rise from his bed, sit up two hours, and came down stairs next morning, feeling no pain beyond tenderness in the shoulder. Two days after he resumed his work as a gardener.

I remarked in this case, as in almost all others, that though the patient could not suffer the slightest touch from any other person, the pressure from my hand gave relief in place of pain. I first noticed this singular fact three years ago, in a very bad case of sciatica, which I cured; and almost invariably I find it repeated in cases of tic, toothache, rheumatism, &c., &c.

We, the undersigned, testify to the truth of the above cure.

Richard Phillips,
Mary Phillips,
M. Phillips,
C. Haynes.

VIII. *Inflammation of the Eye.*

August 27th, 1846.

James Smith had experienced considerable pain for several days from an inflamed eye, accompanied by a sty on the upper lid. All pain and inflammation was subdued by my twice mesmerising him. A hard substance still remains,

arising, I conclude, from want of perseverance in the use of mesmerism and *mesmerised water*.

James Smith,
Avandale House.

IX. *Tooth-ache.*

August 11th, 1846.

Harriet Haynes relieved of a violent tooth-ache in a few minutes. It returned two or three days after from exposure to cold, accompanied by a swelled face, which drew the mouth and eye awry. In a few minutes the swelling and pain were removed, and the features restored to their usual position.

(Signed) Annie Elizabeth Andrews, 9, Horwood Terrace,
Harriet Haynes, the Aviary,
Ellen Wallace, Laurel Lodge.

X. *Inflammation of the Eye.*

August

Sara Phillipps had bad eyes, greatly inflamed, for three months: was quite cured by seven times mesmerising.

Sara Phillipps, her mark x
Anne Phillipps, her mark x

XI. *Liver Complaint.*

Anne Phillipps had, as the doctors said, liver complaint from the age of 7, and is now 12. Suffered great and almost constant pain in her side, which had been much swelled. Had been a dispensary patient for years, and derived no benefit from the remedies prescribed. Never had any pain from the first time she was mesmerised, three weeks ago, and thinks she is now quite cured.

(Signed) Sara and Anne Phillipps.

Both these cases continued well when I left Cheltenham at the end of October.

XII. *Scalded Arm.*

We, the undersigned, certify that Harriet Haines scalded herself so severely, that she compared the pain she endured to having her arm "from the shoulder to the end of the fingers thrust into the fire." In the presence of Mrs. Thomas, Miss Wallace entirely removed the pain, leaving little re-

mains of the redness and inflammation that followed the accident; and a *complete cure was effected in about three minutes*. In the course of a few days, the skin came entirely off the hand and arm, leaving a new skin in its place.

Under ordinary *medical* treatment, the patient herself, and all who witnessed the accident, feel convinced her sufferings would have been severe and protracted.

Jane Thomas, Pittville Villas,
 Sarah English, 9, Northfield Terrace,
 Mary Ann Williams, } Laurel Lodge,
 Ellen Wallace, }
 John House, }
 Harriet Haines, } The Aviary.
 Ann Taylor, }

Laurel Lodge,
 October 8th, 1846.

XIII. *Inflammation of the Eye.*

Sept. 14th, 1846.

Caroline Reeves suffered from violent inflammation of the eye for four years, which terminated in the *total loss* of the sight of one eye about four months ago. She had consulted Dr. Selwyn, Mr. Cook, Mr. Wright, and Mr. Evans, without deriving any benefit; and when she came to me, she feared she was losing the sight of the other eye. Some of the medical gentlemen said the sight never could be restored, as the nerve of the eye was destroyed: the pupil was nearly covered with a speck, that appeared deeply indented.

After the first mesmerising, the pain was much subdued; and after the third, all redness and inflammation had disappeared, and both eyes felt stronger. The fourth mesmerising enabled her to see a little with the blind eye, and in three days more she read a newspaper by candle-light; and her eyes have now remained well for nearly a month, and every day they appear to be gaining strength. Three weeks before Caroline came to me, she applied to Miss Kirkland for an in-door ticket for the hospital, as she was told that the only chance of saving her remaining eye was getting absolute rest for some time; and, she being a friendless orphan, this could only be obtained by admission into an hospital. Miss Kirkland kindly tried, but without success, to obtain the desired admission for her.

Caroline is servant to Mrs. Olive, fishmonger, High Street, who has been very kind in getting medical advice for her, and sending her regularly to me at much inconvenience to herself.

We, the undersigned, certify the above cure to have been effected as reported.

(Signed) Caroline Reeves, her mark x
 Mary Ann Williams, Laurel Lodge,
 Annie Andrews, 9, Noerwood Terrace,
 E. Turty, Manchester Walk,
 Sarah English, 9, Northfield Terrace,
 Sam. Baker, Haynes Cottage, Wynchomb St.
 Ellen Wallace, Laurel Lodge.

Mrs. Olive and her daughter expressed their willingness to attest Caroline's restoration to sight, and I left the case for their signatures, but through some neglect it has been sent to me without, and there is not time now to apply for them.

XIV. *Deafness.*

Peter Baker, 4 years old, became deaf from cold. At the request of his father I mesmerised him, and he went into so deep a sleep that he was carried home and put to bed without awaking; and the next day his hearing was much better.

At the second mesmerising he walked about the room without awaking, and was quite insensible to the prick of a pin, pinching, &c., and his hearing was entirely restored.

Signed by the father and mother of the child,

Laurel Lodge,
 Oct., 1846.

Samuel Baker,
 Ann Baker.

XV. *Pain from a fall, and Scalded Hand.*

Mary Bowyer fell down a flight of stairs in the dark, striking her side and back with great force against a projecting window-frame on the landing. When telling me of the accident next day, she said the shock she received was tremendous, and the bruises were very black, but she hoped they would not signify.

Two days after she told me she greatly feared she had sustained some internal injury, and that the spine was hurt, for every time she came up stairs or drew a deep breath, she felt pain in her back; adding that her fellow-servant assured her he was certain I could cure her, which I did *completely*, by a few minutes' *local* mesmerism.

About a fortnight afterwards, Mary scalded her hand very

severely, and came to me in great agony, having applied flour and *ink* to her hand, which formed a paste: over this I put some cotton wadding, and after the application of local mesmerism for about ten minutes, to my great surprise she sunk into a profound sleep, which lasted about two hours, when she awoke perfectly free from pain. Two hours after the pain returned, in consequence of her washing off the ink and flour. I again put her to sleep in a few minutes, and on rousing her up in about half an hour, she declared the pain entirely cured; and a very slight redness was all that remained of this serious accident. The next day I sent her in to Dr. Elliotson, who expressed much satisfaction with both the cures. The skin came off her hand very gradually in the course of the following week.

The undersigned witnessed the scald and its cure.

Ellen Wallace,

Samuel Baker,

Mary Bowyer, her mark ×

Kensington,
Dec. 7th, 1846.

At the termination of these narratives by Miss Wallace, I must tell the medical world, that, however they may sneer, no means which they would have employed could have effected speedier, or so speedy, cures. No disagreeable drugs had to be swallowed: no painful or irksome local measures had to be borne.

When in Switzerland lately, I met that excellent man, the Rev. Mr. Pyne. He told me that his driver a few days before fell off the box, and hurt his shoulder and arm so severely that he could not hold his whip or move the limb. Mr. Pyne mesmerised the part, and presently the man was astonished to find he could move the arm freely and hold his whip. Subsequently to this, he met a gentleman with an agonizing tooth-ache. Mr. Pyne said he thought he could benefit him, and in a very short time the gentleman found his pain gone by local mesmerism. Was not this as much as the established medical means would have effected? If the devil lent his hand invisibly to Mr. Pyne and Miss Wallace, I can only say it was very good of him: and I shall begin to like him.

JOHN ELLIOTSON.

V. *Cure of Fatuity, Insanity, &c., &c.* By Dr. ELLIOTSON.

"John Elliotson, M.D., has laboured with all his might to ruin his own prospects, and bring his profession into disrepute. *Sorely has he suffered for the part he has played. His position is irretrievably lost. No man now cares what Dr. Elliotson says or does.*" Mr. F. S. GARLICK, Medical Practitioner, 5, Cheapside, Halifax. Nov. 10, 1846.—*Halifax Guardian*.^m

IN November, 1842, Mr. Morgan, Surgeon, of Bedford Row, called upon me to request I would see a poor child whom *he had been treating for four months without the least benefit*, and in whose case no measures of the ordinary routine of medicine now suggested themselves to him as calculated to be of any use. The mother had heard of the wonderful case and cure of Miss Emma Melhuish, of Bedford Street, opposite the Three Cups Yard, in which she lived, the remarkable and most instructive details of whom are given in the fourth number of *The Zoist*:ⁿ and had told him that, as her daughter still lay in the most wretched state, not at all improved, and he held out no hopes to her of being able to do any good, she should be thankful if he would go to me and ask me to try to cure the poor child with mesmerism. Mr. Morgan did not fall in a passion at her "ignorance" and "impudence;" he neither "swore" nor "bounced;" neither did he "laugh at her as a fool;" he did not tell her that mesmerism was a "complete humbug," and "wonder she could believe in such nonsense;" he did not tell her that I was a "quack," "a very clever man once, but now a lost man," "mad," and that "nobody now cared what I said;" that "Mr. Wakley had exposed all mesmerists and mesmeric patients, and destroyed mesmerism years ago, *for ever*;" that I "had been turned out of University College and its Hospital on account of prescribing mesmerism;" that Dr. Forbes had killed mesmerism after Mr. Wakley had killed it, and both would kill it several times yet; that my "*prospects*"^o were ruined;" that I "was ruined and going to leave England for ever;" that "mesmerism was a most dangerous thing, and persons sometimes could not be awakened again, and that it might cause apoplexy, or perhaps insanity for life;" that "the Okeys are both in lunatic asylums through it;" that "the coma might so overpower the system and produce such a shock, that the system might *never rally*;" that "if the child was mesmerised, he," though he confessed

^m I am not aware of having done anything to offend Mr. Garlick, or even heard of his existence before.

ⁿ Vol. I., p. 429.

^o "God bless the mark!" after being in practice thirty years!

he could do nothing for it, and was no longer attempting to do anything for it, "would never attend it again;" nor, "should the mother have any more family, that he would not attend her in her confinement, if mesmerism were allowed to enter the house;"—all which deliberate falsehoods and threats have come to my knowledge as uttered by modern practitioners of what is absurdly called high standing and of middle standing, royal practitioners, titled practitioners, graduates of English universities, fellows of colleges, hospital physicians and surgeons and professors and teachers, the middle orders taking courage at seeing their superiors act thus; and also by the most miserable distributors of physic. He did not say, as the most fashionable physician of the hour did to a baronet, a patient of mine, who consulted him in my absence, on finding that I attended him, "Oh that gentleman who has always got some crotchet or other: and has now got hold of mesmerism:" and on being then asked if he had ever witnessed a mesmeric case, replied, "No; and nothing shall ever induce me." No; Mr. Morgan immediately called upon me, and made the request, honestly saying, "certain it is that neither myself nor others" (I use the words of a letter subsequently written to me by him) have produced the least benefit upon a set of symptoms as strange as I ever witnessed, and as difficult, to me at least, to understand or describe."

"In the summer of 1842, (continues his letter,) I first saw her, labouring under the following symptoms; constant pain in her head; with difficulty roused to the slightest exertion; bowels obstinately costive; lying for weeks in a semi-comatose state, sometimes crying, again laughing; painfully susceptible to the least noise, at one time almost refusing food, at another ravenous, refusing however to eat before any one, but screaming if a basket kept in her bed was not constantly supplied, not with proper food, but cakes of all sorts, jellies, and new bread. Her appearance pallid in the extreme, and daily wasting away. I tried *in vain*, in their turns, stimulants, cordials, tonics, local bleeding, purging, blistering, constant cold applications to the head. Some other medical men saw her; I don't know their treatment, but when I was again called in I was at a loss what to do, and sent for you."

On the 4th of November, 1842, at four o'clock in the afternoon, I accordingly went to see the child. Her name was Sarah Wiltshire: and her age eleven years. The account given by her mother was the following. She herself had been attacked in the mews by a drunken man, who abused her in the grossest manner. The child was terrified, seized

with a violent tremor, screamed excessively and continued to do so. At length her hands became clenched, her jaws locked, and she fell into insensibility which lasted three days; her head working about all the time; and not a particle of food or drink being swallowed. Her sensibility then returned, and she ate voraciously, *lying constantly on her back, moaning, rolling her head, and working her hands: and a fit of screaming and rage took place every hour or two, in which she attempted to bite everybody*; the bowels were never relieved without medicine: and she had also a violent cough, like the barking of a dog.

In this state I now beheld the child. *She could not speak, and had not spoken from the first, and the bowels had not acted for nine days, nor had she SLEPT AN HOUR AT A TIME. She was pale and looked thin, sickly and fatuitous.* She could not even sit up in bed: thus there was extreme general debility, and the greater part of the nervous system was in disorder. She was fatuitous and maniacal; had great excitement of some of the portions of the brain concerned with emotion, and of parts concerned with muscular action.

Finding that aperients, like all other medical means, had failed, and, what was worse, had always aggravated the symptoms, I entreated that no aperients, nor indeed any other drugs, should be given, whatever the length of time the bowels might remain torpid. I have repeatedly seen the cure of St. Vitus's dance thrown back by the use of active purgatives or by diarrhoea excited by eating improper things while the disease was yielding to iron, with which I have never failed to cure the disease when I superintended its use myself. Feeble, nervous, and dyspeptic persons suffer exceedingly from similar injudicious treatment, as well as by the prevalent use of mercury; many such patients are the better for habitual action but once every second or third day.

I made slow and long passes at a very short distance from her, from opposite the forehead to opposite her stomach, as she lay. At first she continued moving her head about and away from me, moaning, and very cross, and she never fixed her eyes upon me or anything. But in *twenty minutes she was fast asleep*: her head ceased to roll, and the moaning was no longer heard. On my speaking to her she was roused up, but a repetition of the passes for *five minutes* sent her back into sleep as sound as ever, and I left her asleep, silent and motionless. It was now twenty minutes to five, and I desired that she might be undisturbed and allowed to wake spontaneously, and she *slept from that time till two o'clock in*

the morning—ABOVE NINE HOURS: she who had not slept one hour together for the previous ten weeks!

Was all this sheer imposture? was her disease imposture? and was the deep trance, the stillness of head and hands, and the silence of above nine hours, the result of imagination in this poor violent and fatuitous object? was it Manchester fatigue of her eyes? which were never fixed upon me.

As she lived too far off for my convenience, and out of my usual course of visits, Mr. Wood visited her daily and continued what I had begun.

Nov. 5th. Sent again to sleep, and left sleepy.

She has not screamed from the time she was mesmerised yesterday; and, though she was left *sleepy* only, *slept well all night*. *She is altogether better*.

6th. The head was rolling about as usual, but became quiet almost as soon as mesmerisation was begun, and she was soon asleep.

7th. Slept from the time she was mesmerised yesterday, at 6 o'clock p.m., till 4 in the morning—ten hours: when she woke for a few minutes, and slept again till 6, making *twelve* hours. She also slept on her side for the first time since her seizure four months before—the cough, which had been very troublesome, was also greatly reduced. She had recovered her speech, but it was only to use *bad and violent language* to all about her in the *fits of frenzy* which often seized her. She was mesmerised in the afternoon and left asleep.

8th. She slept from the afternoon of yesterday till 8 o'clock to-day. During the mesmerisation to-day the cough ceased, she turned on her left side, went to sleep, and was left sleeping. *Her bowels acted to-day spontaneously*.

9th. She slept from 6 o'clock last evening till 7 this morning—*thirteen* hours. She has *no cough* to-day; is *stronger, and decidedly better*.

Soon mesmerised to sleep, and left sleeping.

The daily report was much the same, till

15th. She had slept all night as usual, except that she woke about 4 o'clock in the morning for a few minutes. She was *much improved*: but, having had no action of the bowels for seven days, a purgative was given, contrary to my express orders, because I felt convinced its action would be injurious, and that the bowels, if left to nature, would at length act spontaneously. The purgative acted violently, exhausted her, brought back the cough, and intensely aggravated every symptom.

The mesmerisation influenced her less; so that she slept from 4 o'clock in the afternoon till 9 in the evening only;

and not soundly as before. The fits of screaming returned frequently.

16th. She was sent to sleep, but slept only for an hour after she was left, and has not slept at all since. Her symptoms are much aggravated, and she is much weaker.

I often observe that the effects of causes injurious to health are felt, as in this instance, more afterwards than immediately, or even not at all at first.

17th. Slept for a short time only after she was left asleep: and had no sleep at night.

She is nearly as bad as before she was mesmerised.

Mesmerism thus had far less power over her now she was reduced. I have often been unable to produce any appreciable effect upon extremely weak persons, even when their complaints were seated in the nervous system, and they were exceedingly nervous. So far is the fancy of uninformed persons incorrect that mesmerism is the influence of merely a strong person over one less strong. The irritable condition which often attends extreme weakness probably tends to prevent the mesmeric influence. At any rate weakness does not favour mesmeric susceptibility.

18th. She slept longer last night, and is much stronger.

19th to Dec. 3rd. Slept well at night: still improving.

Dec. 10th. Much better: but still rolls her head.

16th. Stronger: spasmodic cough gone.

Jan. 3rd. Pretty well. Is able to walk across the room. Will now be mesmerised every other day only.

20th. No symptom but a degree of debility. Will be mesmerised but twice a week.

Feb. 1. Perfectly well: and walks about as usual. To be mesmerised but once a week. *Her bowels always act regularly.*

20th. Mesmerism to be discontinued.

In the autumn, seven months after her cure, she was terrified again by the same man and suffered a relapse; which, however, was soon removed by mesmerism.

Mr. Morgan wrote to me about Christmas last year. "You will be pleased to hear she continues quite well; has all her faculties; has assisted in teaching in a Sunday school,^p much to the satisfaction of the lady patronesses. Her mother thinks her quite well, and attributes her return to health to your advice and attention."

Her mother was right: and nothing but the most perverse prejudice or dulness could suggest a doubt upon the point.

^p Satan little thought while he was curing her, that this ungrateful return would be made to him.—J. E.

Unhappily, after being well nearly three years she was terrified a third time on the 14th of last June, and suffered another relapse: and the mother herself came to me for assistance. There was some mistake in taking the address of their new abode, and I did not see her for a week. She remained without any improvement all this time, and nothing had been done for her. She was feeble, almost sleepless, fiercely outrageous, after having been sullen for the first three days. The bowels did not act for the first fifteen days, and during that time she lived upon jelly; they had acted spontaneously, however, before my arrival. She could not sit up in bed; had fits of insensibility several times a day; and suffered pain in her head.

I easily sent her, who had been so long nearly sleepless, into a sleep which lasted from four that afternoon till ten the next morning.

I desired the mother to make the passes twice a day just as she saw me do. She followed my directions and regularly produced sleep, which lasted very many hours: and she thus soon cured the child. *Nothing else was done.* The bowels soon became regular; and I saw the girl on Friday last, December 11, stout and in perfect health, in Three Cups Yard.

It will be observed that when she was asleep, we left her. In a former number I stated that if I had my own way—had no special reason for deviating from a general rule—I *would never wake a patient*.^q The longer the sleep, the greater generally the benefit. Still patients in their sleep-waking sometimes tell us that they should sleep only a certain time; and then we ought always, where there is no delirium, to follow their directions. Without such instructions we may discover that sleep beyond a certain time does not leave them so well. This is, however, very seldom the case. Sometimes they grow uneasy in their sleep, and it is well to wake them and generally to send them to sleep again. But if none of these things take place, I should never wish to wake a patient; nor do I, except for mere convenience, as when they come to my house and I am obliged to go out at a certain hour, or when their avocations will not allow them to sleep beyond a certain time.

They are sure to wake spontaneously sooner or later,—as sure as we are from common sleep when we go to bed. An unfounded fear prevails that persons may never wake again from the mesmeric sleep, because it has appeared in the papers that particular patients could not be awakened. We sometimes cannot wake them just when we wish. But if we wait,

^q *Zoist*, Vol. III., p. 41.

we are able after a time; and, if we wait still longer, they are sure to wake of their own accord. There was an account of a lad at Deptford who could not be wakened. In his sleep he said he could not be awakened till the next or following day at a certain hour. Nor could he. But at the hour mentioned, he awoke spontaneously; and is well and thriving at this moment.^o

The longer the sleep, the greater usually is the benefit. *Yet patients are every day cured without sleep or any other sensible effect*: so that mesmerism should have an ample trial of many months in every case, although no sleep take place. I have never yet failed of curing St. Vitus's dance: but never yet sent a patient in that disease to sleep. On the other hand, sleep-waking may be readily induced, and endless exquisite phenomena present themselves, and yet no improvement take place. I mesmerised three cases of epilepsy for three years daily, and produced nearly all phenomena short of clairvoyance and sympathy of sensation, and did not cure one of the three.

Generally the more experiments are made with traction, rigidity, &c., though not always with mesmerised water or metals, and the more a cheerful conversation is carried on in the sleep, the better.

Generally the deeper the sleep can be made, by breathing, continued passes, laying the fingers over the eyeballs, or the hand upon the head, &c., &c., the greater the good. Not, however, always. I have seen a few patients, who, after they have been mesmerised some weeks or months, suffered if the sleep was made so deep that they could not converse. Some suffer at last if they are mesmerised often: so that those who were at first improved by mesmerism twice a day are the better for having it only once a day; then for having it every other day, and so on.^p When no sleep was even induced, but passes made for half an hour with no great sensible effect, I have known them at length produce discomfort if continued as long as at first, and I have been obliged to reduce the time, till at length I made them for only a minute or two, and less and less frequently in the week. A very deep sleep produced by metals or water, or in any other manner, may at length completely overpower the system and greatly exhaust its strength.

It will be observed that this little girl was left asleep. When this can be done, it is a happy circumstance, and we ought always to attempt it the first time. But when it is found that the patient cannot be left by the mesmeriser without distress, we must remain. In some instances this will

^o *Zeist*, Vol. I., p. 472. ^p *Zeist*, Vol. I., p. 426.

wear off, especially if others in the mesmeric state are present; for persons generally become agreeable to each other in the mesmeric state. We ought carefully to ascertain, not only that the patient may be left by us, but that he can allow the presence or proximity of another. If he cannot, and we leave him in charge of some one, great mischief may be occasioned.

JOHN ELLIOTSON.

VI. *The British Association and Cerebral Physiology.*

TO THE EDITOR OF THE ZOIST.

SIR,—The accompanying particulars relative to the proceedings of the British Association for the Advancement of Science at their annual meeting in the year 1846, deserve, I think, to be chronicled.

At the Ethnological Section, after the reading of a paper by Dr. Latham "on the distribution of round and elongated crania," by Prof. Retzius, I exhibited a cast from a skull (found on Portsdown Hill with flint celts and arrow-heads), as a fine specimen of unmixed celtic. During the discussion which ensued, Mr. Ogilby, a member of the committee, observed that "a marked difference was observable in the skulls discovered in ancient tumuli in Britain, according as they were found associated with iron, brass, or stone weapons, the former being the best developed in the forehead, and the latter the least, *as might be expected from their barbarous condition.*" On this latter remark, Mr. Ogilby was immediately called to order by the chairman, Dr. Latham, and reminded that phrenology was a prohibited subject!¹

In a society, one of the avowed objects of which is to trace the cause of the differences amongst mankind, one would have supposed that nothing could be more pertinent, or more calculated to further the ends for which this society professes to be constituted, than facts and remarks of a similar character; but it seems that the wisacres who have assumed the management of its affairs have decided differ-

¹ The physiology of the brain a prohibited subject! However, we can conceive it, for Dr. Roget manages its prohibition at the Royal Society, and has for years exerted himself successfully to prevent a phrenologist from being put upon the council, putting others on it, just elected, who have never contributed to the Philosophical Transactions, nor done more than merely compile, or not even that. But he is not likely to hold office much longer.—*Zoist*.

ently. The sooner a little common sense is instilled into these parties, or their place supplied by more competent men, the better for the interests of the body they misgovern.

I could not learn the origin of this strange decree, but it is probably a sop to the anti-phrenological tendencies of their president, Dr. Pritchard, and kindly designed to protect him from the possibility of the mortification of a face to face refutation of the vast deal of nonsense he has written on the subject. However this may be, the enactment as it at present stands, certainly places the society in a false position, and makes it cut a very ridiculous figure. It would be curious to see in what form it shews its face to daylight in their minutes. I would suggest the propriety of re-writing the "Declaration of the objects of the Society." It should now stand—"This society is instituted for the purpose of investigating the differences amongst mankind, together with their causes, EXCEPT SUCH AS ARISE FROM VARIATIONS IN THE DEVELOPMENT OF THE BRAIN." In this form its consistency and philosophic character could scarcely fail to penetrate the thickest cranium.

Philology appears to be at present the science most in favour with the leaders of the Ethnological Society, who appear to entertain the most absurd and preposterous ideas as to the extent and accuracy of the information respecting the races of mankind to be derived from this source. To go no further than our own country and France, how deceptive is the evidence afforded by the languages of the inhabitants as to their descent, and how much more so will it become in the lapse of a few centuries, when in France (leaving out of view the *mélange* of races in the south) we shall have the nearly pure celts of Britany speaking French as the nearly pure Teutons of Normandy do at the present moment; whilst in England there can be little doubt but that English will be the tongue spoken by the celtic inhabitants of Wales, the Highlands, and Ireland.

The Ethnological Society would do well to recollect that in the mixture of races, the *physical characteristics* that ensue are evolved by fixed and unvarying laws from those that were inherent in the progenitors, whereas the language that results is determined by various extraneous political and social considerations, imposing in one case the language of the invading race on the people subdued, in another that of the conquered on the conquerors.

I make these remarks with no wish to disparage philology, which I regard as a most interesting study and a valuable adjunct to others, but merely to shew that for the purpose of ethnology the evidence it affords is vague and uncertain com-

pared with that which phrenology presents—subordinate in fact; for phrenology points out the cause of the various peculiarities which characterize the languages of different races, in certain concomitant peculiarities of cerebral configuration; and sheds a flood of light on the whole question of language.

To give merely one example,—how extraordinary to Europeans appears the want of inflection in the monosyllabic languages, and the vast number and intricate character of their written signs! To the Chinese and other nations who employ them, however, this intricacy has no existence; the symmetry of their countenances being to our eyes distorted by the enormous development of the organ of Form, whilst the part of the brain appropriated to the cognizance of sound is very defective.^r

Till the Ethnological Society is led by men sufficiently intelligent and free from prejudice to discern that cerebral physiology lies at the very root of ethnological enquiries, it is easy to foresee that they will make no progress towards any classification of races of a philosophical character.

In connection with the extreme alacrity manifested by Dr. Latham in repressing the slightest approach towards phrenology; his own head, which is strikingly illustrative of the truth of its doctrines, somewhat amused me; for no phrenologist, after viewing his enormous eyes à *fleur de tête*, could be at a loss to predict to what department of philology he would devote himself; and the lecture he delivered on “Ethnological Philology,” afforded one of the best specimens I have ever heard of that tiresome verbose style which results from the organ of Language in excess, and particularly when associated with large Order, Caution, and Self-esteem.

On Friday, I attended the physiological section to hear a lecture from Dr. Carpenter on the “Physiology of the Encephalon.” Shortly after taking my seat I was informed by Dr. Forbes that Dr. Carpenter was “going to upset phrenology altogether;” to which I replied that it would “cer-

^r Even amongst Europeans a very correct inference of the size of their organ of Form may generally be drawn from the degree to which they avail themselves of the method of copying on paper as an adjunct to memory in the teaching or learning of a foreign language. I have long made the remark that teachers who insisted strongly on the advantages of the use of the pen had a large Form, whilst those amongst their pupils who never become converts to the doctrine were defective in this organ. The fact shows the impossibility of any universal—best possible—*system* being discovered, and illustrates the folly of those teachers who would vigorously impose on all pupils that precise method for which their own organization happens to have the most aptitude.

tainly be a novelty to hear an inductive science upset by argument." To my surprise, however, Dr. Carpenter never alluded to the subject of phrenology in his lecture, which consisted of a fresh hash up of his old doctrine relative to the functions of the cerebral ganglia.

After he sat down, I rose and enquired whether he drew any distinction in function between the thalami optici and the corpora striata; or whether he attributed the function of sensation—a mediate office between the brain and the rest of the body—and the experiencing of emotions, to these ganglia in common? To which latter query he replied in the affirmative.

I then observed that I could not help expressing my surprise that any one in the year 1846 should deliver a lecture on the "Physiology of the Encephalon," without once mentioning the name of Gall;³ and my still greater wonder that after he had spent a lifetime in amassing facts in support of his system, and cautiously established it step by step on the firmest inductive reasoning, an individual should be found to come forward and coolly propose to substitute in its stead a mere speculative theory of his own, to corroborate which he did not even pretend to have collected a single fact. That convinced as I was from personal examinations many hundred times repeated, that the emotions were seated in the cerebral convolutions, I of course regarded Dr. Carpenter's localization of them in the thalami and corpora striata to be a gross error; that I differed from him equally as to the seat of feeling, which an extensive series of observations induced me to place in the cerebellum, but agreed with him in his opinion that these ganglia performed a mediate office between the brain-proper and the rest of the body. Finally, I stated

³ The Association is just where it was in 1833. Dr. W. C. Henry of Manchester was appointed to draw up a "*Report of the Physiology of the Nervous System*," in order to put the members in possession of all that is known of it; and his report is printed in the *Report of the Third Meeting of the British Association*. The reporter never once mentioned Gall's name, though he detailed the barbarous experiments of Dr. Magendie upon living animals; and, passing over Gall's vast discoveries, called the discovery of certain nerves being for sensation only and others for motion only, the most important discovery since Harvey discovered the circulation! Yet no new principle was discovered. "We knew before that some nerves, as the optic and olfactory, were for sensation only, and some, as the common motor, the external motor, and the internal motor of the eye, and the lingual, for motion only. The only discovery was that two individual nerves were, one for the first function and the other for the second. That no one nerve could be for both sensation and motion had always been evident to reflecting minds. Galen taught his cotemporaries that one set of nerves went to the skin for sensation, and another to the muscles for motion."—*Elliotson's Physiology*, p. 465.—*Zoist*.

that I regarded it as contrary to all sound physiological principles to attribute three heterogeneous functions to the same organ.

Dr. Carpenter in his reply made no allusion to his omission of the name of Gall in a lecture on the functions of the encephalon, but warmly denied that my statement, that he had brought forward a mere speculative theory unsupported by facts, was a correct description of his procedure. He next proceeded to explain that emotions were compound, consisting of two parts, one of which he located in the ganglia, whilst the other was probably seated as described by Gall. In support of assigning several functions to one organ he quoted the spinal marrow, which both received impressions through its afferent nerves and propagated motor influences through its efferent nerves.

I contended in reply that the receiving of an impression of a specific kind and responding to it in a specific manner was clearly only a single function. One was dependent upon the other, in fact, included in it: that no more simple function or mode of action was even conceivable, and that the illustration Dr. Carpenter had adduced, far from supporting his argument, told against it. Dr. Carpenter made no rejoinder, and here the discussion between us terminated.

I am sorry to have to record my belief that the general tone and character of the proceedings of the British Association at Southampton, and the bearing of its members, was not at all calculated to increase the respect of the public for the character of scientific men. Instead of evincing a calm reliance on the dignity and utility of their own pursuits, there was manifested throughout their proceedings a certain fidgetty anxiety to be appreciated, the betrayal of which was most calculated to defeat its own object—a tendency to self-glorification and puffing, which to say the least overstepped the bounds of good taste—and none of that forgetfulness of self in the cause of science which would have at once commanded that respect and estimation which was angled for in vain.

The president, Sir R. Murchison, has shewn himself to be an able man, and appears to be an amiable and worthy one: but his eyes seem never to have pierced through the fogs of conventionality, in which we are all of us more or less educated, and I fear he is grievously afflicted with the national disease which our friend *Punch* terms snobbishness.¹ Many were amused at the evident satisfaction with which, referring

¹ Perhaps some will say on this account "all the fitter to preside over a body of the most arrant and undoubted snobs in England." In the "Snob Scientific," *Punch* has yet in reserve the richest chapter of his history.

to the visit of Prince Albert, he congratulated himself that "*science was honoured (!) by the sanction (!) of royalty*" at the anniversary over which he presided. This visit of the Prince was a subject of great triumph to the members, but to bystanders, the hurrying from section to section, and spending about ten minutes in each, had more the appearance of gratifying curiosity, than a compliment. At any rate none but the magnifying eyes of the *savans* could discern the evidence of any strong predilection for science in such a proceeding, and in the untruthful effort to twist it into something *it was not*, they made themselves ridiculous, not to say contemptible. At the concluding meeting, Dr. Robinson, of Armagh, informed the assembly that "he paid particular attention to the proceedings of the Prince at the mechanical section, and that he not only inspected the model for the tubular iron bridge over the Menai Straits with great attention, but asked Mr. Fairbairn a question relating to it, *which was decidedly a sensible one.*" This speech was doubtless intended as a compliment, but it was certainly an Irish one.

I have often heard the complaint made that men of science are not respected in England; but when they themselves set the example of the most fulsome adulation of rank and wealth, and instead of selecting their best and wisest as leaders, bow and cringe to every rich aristocrat around, and entreat him to come and rule over them, endeavouring to cage him as their lion, that they may borrow from his mane and tail a little of that dignity which it is apparent in their opinion the pursuit of science alone is incapable of bestowing,—when even their honorary titles of F.R.S. and F.L.S. are given continually to persons of not the least pretensions,—who will venture to say they are not respected as much as they deserve to be? When was it ever known that those wanting in respect to themselves, could excite this feeling in others?^a

It is truly a melancholy spectacle, that, at a time when the aspirations of the multitude rise in quest of some fitter object of reverence than the standard of nobility formed in a barbarous age, or the possession of riches, those who ought to be their guides to a purer worship—that of *intellect working in the service of charity and truth*, set them the example of lick-

^a A German Physician, named Ingenhouze, who behaved in the blackest manner to Mesmer, was an F.R.S. In reference to which Mesmer remarks, "The title of Fellow of the Royal Society of London ought not to be thought much of. France and England in this are alike. The undeserved and prodigal bestowal of literary distinctions will reduce their value till no man of real merit will desire them."—*Précis Historique des faits relatifs au Magnétisme Animal, jusques en Avril, 1781. Par MESMER, Docteur en Médecine de la Faculté de Vienne, ouvrage traduit de l'Allemand. Londres, 1781.*—Zöist

ing the dust before the idols of feudalism—a thing in which all vitality is dead—a dry skeleton devoid of blood and muscle.

All human institutions at the period of their birth supply some want of society, and there was *common sense* in the homage the vassal paid his lord when he received in return protection for life and property. Not for nothing did he doff his cap to the victorious leader, who, bold of heart and strong of hand, led him to foray amidst the fat beeves and rich flocks of some neighbouring chieftain. But in the present day these relations exist no longer, all is changed, and the worship of feudalism—the child of anarchy, ignorance, and barbarism—is no longer in harmony with the spirit of the age; the nation has outgrown it, and a living faith in it is as impossible in the present state of education and enlightenment, as the belief in the Jack the Giant-killer and the Little Red Riding-hood tales of the nursery is to the adult man.

Who can calculate the injury to public morality, caused by the erection of false and vicious standards, void of all connection with merit, for homage and imitation? Hereditary claims to reverence, perfectly intelligible and well founded in the conquerors of an inferior race, as long as by avoiding intermarriage they have preserved their superiority, become absolutely inane and senseless when distinctions of race exist no longer; and at the present day there is no more pitiful sight than to see that useful social instinct of reverence in the multitude, the bond of society, and root of subordination, law, and order, perverted from its proper objects, *the noble by nature*, and directed to aristocracy, which often owes its origin to a system of government by corruption, and has often won its honours by the possession of sufficient talent to be troublesome, united to the servility and want of principle that made this purchasable. The benighted ignorant savage who bows down before the black-faced goggle-eyed fetish of his own carving, does not display an example of a grosser, more misplaced, and more absurd perversion of the venerative tendency, than is exhibited in the conduct of our men of science at the present day, in their worship of mere rank and wealth.

I make these remarks in no spirit of hostility to the British Association and our other scientific bodies; on the contrary, they have my best wishes for their prosperity, for I honour and reverence science, and it is precisely on this account that I feel indignant to see it degraded by the conduct of its votaries. Equally far is it from my intentions to include the whole of the members of these societies in my censure; on the contrary, I know they number many amongst them who,

as much as myself, loathe the spirit of sycophancy which at present soils and degrades them, and are equally desirous that they should recognize and accept their true position in the era; and, becoming leaders of progress to what is good,—the foremost to forsake what is worn out and worthless,—set a worthy example for their countrymen to follow. Then shall they be respected, aye, and not grudgingly, for humanity yearns to have for leaders its best and wisest—the noble by nature, instead of by distinctions which, as often as not, are ill-deserved and were worse acquired.

T. S. PRIDEAUX.

Southampton, Nov. 1846.

VII. Dr. Carpenter and the Antiphrenological Physiologists.

"A verye follishe man maye wryte a boke,
Aye, and a greate boke too, syth Ignorance
Affecteth oft more wordes than wysdome doth,
To hyde her ignorance, and sprede out her lernynge."

There is no more prevalent error at the present day committed by the simple minded public, who have never been behind the scenes and had a peep at the *machinery* of authorship, than that of accepting the fact of a man's name being appended to a "greate boke" as a credential of wisdom. The circumstance pretty surely indicates that the individual possesses a laudable amount of industry and application, and affords a strong presumption of the existence of a passably good opinion of self, combined with a considerable desire of distinction and sufficient command of language to render the process of composition easy; but as to its affording any guarantee of the possession of that soundness of judgment which would entitle the writer to be regarded as an authority, nothing can be further from the fact. We defy any one to shew that the circumstance of an individual assuming the office of guiding the public mind affords the slightest evidence of his being well qualified for the post. Often men of genius, the discoverers and inventors of their age, from a deficiency in language, abominate the drudgery of authorship and can with difficulty be induced to narrate the history of their own achievements; whilst, on the other hand, the most barren intellectual soils, as far as self-production is concerned, compose with such facility that they adopt the manufacture of books as a means of livelihood.

It is by this latter class that the community is inundated by a deluge of works which may be searched through and

through, and searched in vain, for a new idea. There are, however, no ideas so stale and hackneyed as not to meet with a class of the public whose ignorance keeps pace with these qualities, whilst a still larger class are so entirely satisfied, provided their ears are tickled with a flow of loud-sounding, well-balanced, nicely-rounded periods, as to require nothing beyond,—and by such parties these productions are regarded as revelations, and their authors, as gifted with a measure of inspiration proportionate to the size of their volumes. The man of observation and profound reflection, the student of nature, who gives to the world the result of his labours in some unpretending brochure, every line of which is *suggestive*, whilst every page enshrines a new idea, passes for nobody; whilst the literary joiner, who pilfers one of his ideas, works it up into a quarto and sends it forth to the world disguised in a court dress, becomes at once a great authority; and although to value ideas according to the size of the volume that contains them is every whit as absurd as valuing a book by its binding or a picture by its frame, such a mode of appreciation does nevertheless prevail with the ignorant and superficial.

In making these remarks, nothing can be further from my intention than to disparage in any way the labours of that useful class whose vocation it is to popularize and disseminate knowledge. No man I think can be more laudably employed; but I do emphatically protest against the authorship of even voluminous writings being regarded as a credential of wisdom and elevating an individual into an authority. A retailer of knowledge *may* be, and often *is*, a very able man, but he is not *necessarily* so. He *may* deserve to rank as a high authority, but if so it must be in right of his own discoveries and original reflections, and not by virtue of his office. In matters of science, the way to test what a man really is, and what he has achieved, is, to ask the question, whether, supposing he had never lived, any science would have had the development of its principles retarded in consequence. Tried by this test many gigantic mushrooms, which occupy by far too much space at present, would suffer a woeful curtailment of their dimensions and dwindle into insignificance. Let the great distinction between those who write to communicate their own ideas, and those who merely assume the pen to narrate the observations, discoveries, ideas, and sentiments of others, never be lost sight of. To confound the *mere writer* with the man of genius who originates, would be as absurd as to class the caster of plaster images with the great sculptor whose immortal inspirations he copies and vends.

The preceding reflections have been excited by contemplating the oft-recurring spectacle of cerebral physiology being assailed by a *reputation*. On such occasions we hear it loudly shouted on all sides that Tiedemann, or Müller, or Dr. Carpenter, "has upset phrenology;" but if one should listen to endeavour to catch what the *arguments* are, only an inarticulate babbling is audible. Shortly after the publication of Dr. Baly's Translation of *Müller's Physiology*, I remember asking several who seemed to be exceedingly well informed as to the fact of the work containing what they termed a refutation of phrenology, in what the argument consisted, but, I asked in vain. With the majority who take their opinions on trust, the name of the authority is the all-important point. Satisfied on this head, the possessors of this indolent creed deem any further examination of the ground of judgment superfluous. It is to the author, not the merits of his case they bow themselves,—to the man, and not his arguments, their reason yields her allegiance. Unsuccessful in my attempt to learn in what Müller's attack consisted, from those who nevertheless congratulated themselves on being supported by it in their antiphrenological tendencies, I resorted to the book itself, and was rewarded by a rare illustration of the dense dulness with which great erudition may be associated.

The enduring nature of the hostility which phrenology has encountered from anatomists and physiologists has sometimes excited my surprise. It might have been supposed that when the first crop of antagonism excited by the jealousy of contemporaries began to fade, all would have united to reverence the memory of a philosopher whose discoveries reflected such an honour on the profession to which he belonged. Instead of this, however, their hostility seems to have become hereditary, and warfare against the disciples of Gall to be regarded as good service against a common enemy. One circumstance that has perhaps perpetuated this feeling has been the difficulty experienced in passing from their old methods of mangling the brain, as an apology for dissection, to the new method of Gall. In the eyes of a pupil who had been accustomed to see it cut up slice by slice like a round of beef, the exposure of previous ignorance involved in a correct demonstration of its fibres, must certainly have been most complete, and not a little unpalatable to the self-love of the egotistic and narrow minded.

Dr. Carpenter, to judge from his writings, was so unfortunate as to imbibe from some of his teachers their prepossessions against phrenology,^b which prepossessions after sundry

^b We know for a positive fact that Dr. Carpenter, when first a student, and

buddings have at length borne fruit in the shape of an article in the *British and Foreign Medical Review* on Mr. Noble's work, *The Brain and its Physiology*. After the critical remarks with which I have prefaced my observations, Dr. Carpenter will have no reason to complain of my not admitting him to be an authority; meaning by this term, an individual whose previous achievements have shewn him to be possessed of that profound penetrating and sagacious mind, which takes the correct view of every question presented to it, and whose decision can safely be regarded by others as indicating on which side the balance of probabilities lies.

I wish to avoid all personality as far as is consistent with the task I have undertaken, but, the position of Dr. Carpenter, as the oracle of Dr. Forbes in the *British and Foreign Medical Review*, together with the tone of assumption and authority he adopts, make it incumbent upon me to examine how far these pretensions are well founded. In my opinion, whatever laurels he may have acquired hitherto, have been in the fields of scientific literature as an historian, and not as an original discoverer or profound critic; and on those occasions, where he has quitted the office of narrator to bring forward some doctrine or speculation peculiar to himself, he has rather diminished than added to his reputation. All must admit his praiseworthy industry and application, for no one will think of denying these qualities to an individual who sits down to write an *Encyclopædia* single-handed, and I am equally ready to concede to him the possession of a considerable amount of literary talent; for though he can boast of no graces of style, and the structure of his sentences is often inaccurate, these defects are counterbalanced by a happy facility in communicating his ideas to his readers, which generally renders his meaning clear and unmistakable, when his own conceptions are definite and distinct.

Possibly I may be but imperfectly acquainted with Dr. Carpenter's career, but in my mind his name principally stands associated with,—

1st. A critique in the *British and Foreign Medical Review*, in which he opposed certain portions of Dr. Marshall Hall's doctrines on the reflex functions, and took a view of the question he was subsequently obliged to retract.

2ndly. With the maintenance of the position that the stimulus of the blood is alone sufficient to produce the heart's action;—since also retracted.

before he was in possession of sufficient knowledge to enable him to form a correct judgment, stated to a professor at University College, that phrenology was in his opinion untrue.—*Zoist*.

3rdly. With the doctrine that no nervous system exists in vegetables; concerning which, I shall merely observe that when I see trees project their roots in a right line across 12 or 14 feet of barren space to the nearest point at which a congenial soil may be found—that poisons which act on the nervous system of animals are equally deadly to plants, and lastly, consider the motions of the sensitive plant so identical with reflex action in animals—I think that the argument from analogy in favour of the existence of a nervous system in vegetables, greatly preponderates over the mere negative evidence afforded by the fact that none has been yet discovered.

4thly. With certain doctrines as to the functions of the cerebral ganglia; the unphilosophical character of which I trust satisfactorily to demonstrate in the present article.

If Dr. Carpenter can lay claim to any important discovery in physiology, or any other achievement which can entitle him to assume the tone of superiority and authority he indulges in, (particularly towards that benighted class, the phrenological physiologists,) I must certainly plead my entire ignorance of them.

I believe it often occurs that phrenologists, at the sight of the propositions of their opponents, are so struck with their absurdity as to deem any serious refutation superfluous, and to conclude it to be impossible that they should ever command the assent of any besides their authors. Such I freely confess were my feelings the first time I encountered Dr. Carpenter's suggestions as to the emotions being seated in the cerebral ganglia. I regarded them much in the same light, and equally as gratuitous and improbable, as I should the speculations of an individual who should propound the theory that, when a joint of meat is placed before the fire, the cooking is effected not by the heat, but by some other simple element disengaged by combustion, which had hitherto escaped notice; and, having first *premised* that this element was always evolved in the same ratio as heat, should next proceed to support his theory by stating that this was strictly in harmony with, and afforded a beautiful explanation of, the fact that cooking is accelerated or retarded as the quantity of heat is increased or diminished. Equally flimsy and unsubstantial with the preceding is the circular mode of argument adopted by Dr. Carpenter to impart an air of plausibility to his chimerical notions. Lest, however, any simple minded individuals who labour under the delusion, that the oracle of Dr. Forbes and the *British and Foreign Medical Review* must necessarily be an authority, should suffer themselves to be

misled by them, I have been requested to offer some observations in reply, a task I can scarcely flatter myself of being able to fulfil without taxing the patience of my readers.

Phrenologists having, by innumerable observations of the relationship between size and function, established on a basis as incontrovertible as that of any fact in natural history, the dependence of certain instincts or feelings upon certain portions of the brain, (say, for example, of Love of Offspring, Attachment, and tendency to fight upon certain portions of the posterior lobe,) Dr. Carpenter acting precisely as if such observations had never been made, and without bringing forward any counter observations of his own, locates these feelings in the optic thalamus. It might be supposed that this edict was intended to be a death blow to phrenology. Not so, however: Dr. Carpenter not only grants it the right to live, but even undertakes the office of reconciling it with his own system; a task he achieves entirely to his own satisfaction byⁱ splitting each emotion into two parts, one of which he assigns to the thalamus, whilst he bestows the other on the brain-proper. Dr. Carpenter maintains,

"That the offices of the cerebrum are restricted to *intellectual*^k operations," and observes, "the first and chief point of collision between these views and the ordinary phrenological system, is that which relates to the localization of the passions, emotions, &c., but it would not we think be found difficult to reconcile the two, so far as this question is concerned. For it may freely be admitted, that there *are* such classes of ideas as those grouped together under the terms Benevolence, Combativeness, Philoprogenitiveness, or Destructiveness; although the pleasure attending the act of entertaining them, which causes them to be habitually kept before the view of the mind, and thus gives them the character of propensities, be not seated in the cerebrum but elsewhere. Now *if we find reason to adopt the phrenological system as a whole*, the only modification it would require, would be to regard the different divisions of the cerebrum, commonly termed *organs*, in the light of *instruments for the formation of the several classes of ideas*, instead of being the instruments of the emotions or propensities taken as a whole into which these ideas so largely enter." . . . "We have no *à priori* objection to make to the doctrine that these different classes of ideas may be formed by the special instrumentality of the cerebrum. We

ⁱ His words are, "That the tendency to the recurrence of a certain class of ideas, constantly connected with feelings of pleasure or pain, constitutes what is known as an emotion, desire, or propensity; and that this is composite in its nature, involving the cerebrum for the formation of the ideas, and the sensory ganglia for the feelings with which they are associated."

^k It is to be regretted that Dr. Carpenter has not defined the meaning of intellectual, according to his ideas.

freely admit too that there is a general correspondence between certain forms of the cerebrum, arising from the relative development of its different portions, and certain leading diversities of character which might not unfairly be regarded as indicating that these several divisions are the special instruments of particular groups of intellectual or moral faculties."

Dr. Carpenter, whom I have allowed, and shall allow as much as possible to speak for himself, to avoid the possibility of my misstating his views, observes :

"The rudiment of the cerebrum which exists in fishes, and which is still more developed in reptiles and birds, is the representative of the anterior lobe alone of the human brain; the middle lobe being first developed in the lower mammalia ; and the posterior being not merely restricted to the higher, but being more developed in man relatively to the remainder of the mass, than it is in any other animal. Now, as upon the usual phrenological allocation, the lower or animal propensities are situated in the posterior lobe, their instrument would seem altogether undeveloped in the beings in which they apparently possess the greatest force; whilst they attain their most complete evolution in that species which is distinguished by his power of keeping them in subjection."

After placing phrenologists in this difficulty, Dr. Carpenter proceeds to offer them what he terms "a feasible method of extricating themselves from this very awkward dilemma, without abandoning any of their fundamental positions," as follows :

"We are not always to regard those *actions* of the lower animals which correspond with our own as indications of the existence of *propensities* in them, corresponding to those from which they emanate in ourselves; these propensities being in fact the states intervening between the exciting sensations and the resulting will, and being compounded of ideas and feelings. Now in beings which are altogether destitute of a cerebrum, the actions supposed to proceed from the animal propensities must be really consensual in their nature; and it may be questioned whether they do not remain so in those vertebrata which have no posterior lobe to their cerebrum; the propensities, that is, the *ideas* of the objects to which they relate, and the *feelings* connected with the mental consciousness or contemplation of them, being really restricted to the higher mammalia, in which they are designed to work upon the intellectual powers and the will to contrive the means for their gratification. On this hypothesis we should expect to find the posterior lobe attaining by far its highest development in man, since in the well-regulated mind the animal tendencies never act otherwise than through the reason and will, that is, in the form of true propensities."

What are, I should like to know, "those fundamental principles without abandoning which, phrenology may be ex-

tricated from the awkward dilemma," in which (according to Dr. Carpenter) she is placed, by fraternizing with his visionary ideas? Can a science which owes its development to the observation that, in the same degree that particular parts of the brain preponderate in size, certain feelings predominate in energy, till, as the ratio increases, they become ungovernable instincts over which the usual restraints of reason and prudence are powerless; ally itself with the doctrine that the higher the development of the posterior lobe, the better regulated the mind, and the more subservient the animal tendencies, to reason and the will? Can a system be supported by a supposition which requires all the inferences on which it was originally reared to have been fallacious, and the doctrines of which it still essentially consists, to be the converse of truth?

Thus then phrenology after being first slain, and then resuscitated by Dr. Carpenter, turns out at last to be the doctrine, that the larger the posterior portion of the brain the more completely will the instincts and propensities be under the guidance and control of reason, and *vice versa*!!! Oh! shade of the immortal Gall, how profound are your obligations to your new disciple!

What the precise development of Dr. Carpenter's posterior lobe may be, I will not undertake to aver, but certainly he affords a rare specimen of that literary Philoprogenitiveness, which is so smitten with the graces and perfections of its own bantling, as to overlook the most glaring inconsistencies and defects. Never have I before seen an individual so completely ran away with by an hypothesis, and ideas so altogether incongruous and incompatible, so contradictory and self-destructive, gravely brought forward in its support with the utmost simplicity and good faith.

So far as Dr. Carpenter possesses clear ideas himself, I find that he is generally very happy in conveying a clear conception of them to the minds of his readers. There is however one most important point connected with the present discussion in which he has so altogether failed to do this—which he has so altogether *sturred* over without attempting its elucidation, that the conviction is forcibly impressed upon me, that it is one on which he himself possesses *no clear ideas*. Dr. Carpenter informs us that an emotion "is composite in its nature, involving the cerebrum for the formation of the ideas, and the sensory ganglia for the feelings with which they are associated;" and also that "there are such classes of ideas as those grouped together under the terms Benevolence, Combativeness, Philoprogenitiveness, or Destructive-

ness," but he altogether omits to enlighten us as to in what such classes of ideas consist, apart from their emotional sensations.

By a class of benevolent ideas, I presume Dr. Carpenter means the ideas connected with a benevolent act or intention; but take away from such ideas the *specific emotional sensation*, and what remains besides certain attributes of time, place, form, size, weight, number, &c., for which we have special intellectual faculties? Nothing else remains—and therefore the sensation being already declared to reside in the thalamus—no alternative is left but to conclude that Dr. Carpenter's doctrine is, that, the various circumstances of time, place, form, size, &c., connected with a benevolent act are cognized by the organ of Benevolence, those connected with fighting by Combativeness, those relating to a nursery by Philoprogenitiveness, and those pertaining to a murder by Destructiveness, &c. A notion which, however it may *harmonize* with his declaration that "the offices of the cerebrum are restricted to intellectual operations," involves a perfect chaos of absurdities.

What a very short distance will common sense carry a man in the paths of science! The illiterate, who can boast of no "stores of knowledge acquired by modes of investigation totally neglected by the professed followers of Gall and Spurzheim," allowing themselves to be led by this guide, have ignorantly concluded that objects and events relating to totally different instincts, nevertheless possessed such a great similarity, or rather identity, in all the simple attributes or specific qualities of which they consisted, as to come under the cognizance of the same intellectual faculties. The correction of this radical error science owes to Dr. Carpenter, and henceforth we must never be guilty of the *bêtise* of supposing that the same organ is sufficient to appreciate the form of a sword, carving knife, and scalpel, or, the size of a phial of poison, a bottle of wine, or an anodyne draught, these various objects being respectively the peculiar property of Destructiveness, Alimentiveness, and Benevolence. I have heard it asserted that a living sheep had two more legs than a dead one; may not the fact derive some explanation from the views of Dr. Carpenter, according to whom ideas of the dead animal would be conceived by the organ of Alimentiveness, whilst those of a living one, would have their seat in Acquisitiveness, or Individuality, according as the creature formed the subject of the contemplations of a grazier or zoologist.

It might be supposed from the extreme lengths Dr. Carpenter seems ready to go in defence of his hypothesis, that

he was prepared with some very cogent and powerful reasons in its confirmation, instead of which, he appears to be able to adduce in its support nothing but arguments of the most lame and impotent description. The following seems to have been the mode in which he was led to its adoption.

The nerves of common sensation being in want of a ganglion, and the optic thalamus being in want of a function, he forthwith resolved to consummate a union between the two. This first step accomplished, the next was to infer that as sensations of pleasure and pain were seated in the thalamus, and as the emotions were attended with pleasurable or painful feelings, *ergo*, the thalamus was the seat of the emotions. This doctrine being at variance with phrenology, with the possible truth of which he seems to be unpleasantly haunted, an attempt was made to reconcile the two by splitting the emotions, (as before described) and allotting a portion to each.

The mode of argument adopted by Dr. C. to arrive at the conclusion that emotions being attended with pleasurable or painful feelings must be seated in the great ganglion of the sensory nerves, is one of the most unique specimens of superficiality I have ever met with, and quite a psychological curiosity.

"All the propensities, emotions and moral feelings, between which and the intellectual operations phrenologists would establish such a marked distinction" may he says be "analyzed." "What is benevolence for example, but pleasure in the contemplation of the happiness of others? What is the whole class of selfish propensities, on the other hand, but the feeling of pleasure in the entertaining of various ideas connected with self? What is combativeness but the pleasure of setting one's self in antagonism with others? Or what is veneration but the pleasure of contemplating rank or perfections superior to our own?"

Oh! this method of *analysis*!¹ What is taking snuff, for example, but the *pleasure* of tickling the nose? What is eating but the *pleasure* of filling the belly? What is a doctor but a short eared *animal* labelled M.D.? or, What is an ass but a thick skinned *animal* with long ears? What is an *animal* but a *lump of flesh and blood*? and what is a lump of flesh and blood but an *aggregation of matter*. Can anything be more *simple*? Oh! new and sublime system of philosophy! every step in which is the abandonment of some

¹ Analysis, a term once used to express the separation of a compound into its elementary parts, but now employed to designate the process of obliterating all distinctive peculiarities under a generic term.

miserable petty detail of knowledge, a stride towards the attainment of the absolute and universal.^j Alas! that men should waste so much time and labour under the absurd delusion that in proportion as they establish specific differences between objects, their knowledge becomes increased! But let us attend again to our instructor.

"Attachment and dislike, affection and rage, joy and sorrow, and many other simple and elementary feelings, are but *modifications* or *phases* of pleasure and pain which receive their different designations according to the character of the objects which excite them, the ideas which they arouse and the mode in which they are manifested."

Let me try my hand at a parody.—Taste and hearing, sight and smell, touch and resistance, pleasure and pain, and many other simple and elementary feelings, are but *modifications* or *phases* of sensation, which receive their different designations according to the character of the objects which excite them, the ideas which they arouse, and the mode in which they are manifested!—and of course in Dr. C.'s estimation no more entitled to distinct nervous apparatuses for their manifestation, than Benevolence, Combativeness, or Philoprogenitiveness.

Like the dog who mistook the shadow for the substance, mankind have ever deluded themselves by mistaking words for things. Three-fourths of the errors and disputes which have occupied them have had no deeper origin than verbal distinctions, which a definition would have strangled at birth. The use of general terms in a loose and indefinite manner has ever been one of the most fruitful sources of these controversies, and in the present instance it would appear as if Dr. C. believed that the circumstance of the same generic name, being capable of being applied to a class of objects, established their identity.

To enter into a serious refutation of the doctrine that emotions of pride and vanity, compassion and reverence, wonder and admiration, &c., are but "*modifications or phases*" of physical sensation, would be absurd. Irony and ridicule are the only appropriate weapons for encountering an extravagance from which, if an individual's own consciousness is not able to preserve him, nothing else can. Let an artist try the experiment whether all that is requisite to depict the natural language of the varied emotions be to place his figures in attitudes indicating different modifications of physical pleasure or pain, and see what the public will say to the result.

^j Qy. A stride towards the attainment of absolute and universal ignorance.—*Printer's Devil.*

In short, so extraordinary appears to me the illusion, that I should be almost ready to query whether Dr. C. could belong to the genus *homo*, had not previous experience convinced me, that there are some individuals who, from a deficiency in the development of a portion of brain lying between Eventuality and Comparison, are almost totally unable to hold their own consciousness before their minds as an object of contemplation. Such persons are incapacitated by nature for elucidating questions bearing on the metaphysics of the mind; yet in this, as in other analogous cases, it often happens oddly enough, that the parties themselves labour under the strange delusion of believing, that the particular pursuit for which they are disqualified constitutes their peculiar forte. Thus Dr. Carpenter says, "on this last point" (that is "the mixed character of the emotions and propensities, as compounded of *ideas* and the *simple feelings* of pleasure and pain"),

"We venture to think that we have made a real advance in psychology, which will prove to be important; and we happen to know that several intelligent psychologists are well prepared to receive it, as fixing and defining views which had been previously floating in their own minds. It seems indeed to have been glimpsed at by the late Mr. James Mill in his valuable *Analysis of the Human Mind*, his deficiency consisting in connecting the feeling too much with the sensation, rather than with the intellectual idea."

I should certainly like to know *who* the intelligent psychologists *are*, who have been waiting for the advent of this extraordinary doctrine, which, only dimly revealed to Mr. Mill, has been manifested to Dr. Carpenter in all the brightness necessarily pertaining to so luminous a conception.

The work of Mr. James Mill, lauded so highly by Dr. Carpenter, who has adopted his views, is greatly inferior in its analysis of mental phenomena to those of Lord Kames and Dr. Thomas Brown. According to Mr. Mill mankind seek wealth, power, dignity, only for the sake of the command which these give them over their fellow-creatures,—whose services may thus be made a means of procuring *pleasure*. On this theory we must suppose, that an unknown criminal, who dresses himself as a dandy for the scaffold, and with his last accents labours to convince the spectators of his innocence, does so from having come to the conclusion after much debate, that it may possibly induce the executioner to adjust the rope round his neck somewhat more tenderly.

Mr. Mill, in conformity with his doctrine,—that all mankind's tendencies are merely modes of manifestation of

a selfish desire for pleasure, proceeds to manufacture parental affection as follows. "A facility of associating the ideas of *his own* pains and pleasures with those of the child"—"the looking upon his child as a cause *to him* of future pains or pleasures, much more certain than any other person." . . . "Man becomes fond of that on which *he* bestows benefits." . . . Oh! ye ignorant vulgar, bow your heads with humility before the profound wisdom of philosophy, and learn for the future that when a man blest with an appetite sits down and makes a good dinner, he eats—because from early youth he has associated this operation with the time of day—from sympathy with those around—in order to keep up his strength—from in short anything you please except a simple instinct to take food.

"The *pleasurable associations*," Mr. Mill informs us, are sometimes carried to such a height as to afford an exemplification of that *remarkable* state of mind in which a *greater value is set upon the means than upon the end*, and persons have been found the one of whom could not endure to live without the other." A mere error in calculation—man being transformed from a creature of impulse into a sort of calculating machine, constantly occupied in solving the problem how the greatest amount of pleasure is procurable—it is quite in keeping, to suppose he should occasionally produce a wrong result.

Speculations of this kind can only be regarded in the light of aberrations of the human mind, and as indicating that the science to which they relate, was, at the epoch which gave birth to them, still in that stage of barbarism which always precedes the application of the inductive mode of cultivation, and the consequent rectification of *à priori* notions by a rigorous comparison with facts.^k Searching for final

^k The following mode of argument made use of about two centuries ago, when chemistry was equally as undeserving the name of positive science, and as purely speculative as metaphysics at the era of Mr. Mill's publication, was employed by a writer of that period to account for chemical affinity, and is at the present day quite a curiosity. "The reason hereof is the resemblance and sympathy they have one with the other. If I should not explicate wherein this resemblance consisted, I should expose myself to the same censure and blame as that which I taxed at the beginning of my discourse, touching those who speak but lightly and vulgarly of the powder of sympathy, and such marvels of nature. . . . The first resemblance shall be touching *weight*, whereby bodies of the same degree of heaviness do assemble together, and keep company together in *equilibrio*, &c. . . . The second resemblance of bodies which draw one another and unite, is among them which are of the same degree of *rarity and density*, the nature and effect of *quantity*, being to reduce to unity all things which it finds, &c. . . . The third resemblance of bodies which unite and keep themselves strongly together is that of *figure*," &c., &c., &c.

causes, which were unnecessary, superfluous, and beyond their reach, has ever been the favourite occupation of metaphysicians. Nature being too simple to content them, they have exercised their ingenuity in the construction of a piece of machinery. But what avails a system of wheels and pulleys, racks and pinions, which still requires a *moving power* to put it in action?

To endeavour to give reasons *why* parental attachment and benevolence should be felt, is equally as ridiculous an employment as the conjecturing of causes for gravitation. As in the one case, so in the other; man's vocation is restricted to studying the laws of phenomena, and ascertaining the conditions under which they take place. "*Homo, nature minister et interpres, tantum facit et intelligit quantum de nature ordine re vel mente observaverit; nec amplius scit, aut potest.*" All we can ever know about the matter, or all we require to know, is comprized in the fact, that certain sensations are excited by certain objects, according to "*laws written upon the nervous pulp.*"

Why the sensations are such as they are, or why they are not different, is a question as inappropriate as the query, why we are not inhabitants of Jupiter. We have first a class of external organs (the senses), in which sensations are excited by certain sensible properties of matter; secondly, a class of internal organs, in which sensations (perceptions^k) are excited by impressions transmitted by the preceding; thirdly, a class of internal organs, in which sensations (conceptions or ideas^k) are excited by sensations derived from the second and fourth; fourthly, a class of internal organs, in which sensations (emotions) are excited by impressions from the ideas conceived by the third class.^l An organ may be considered, 1st, in relation to *the objects* which excite it to action; 2ndly, in relation to the *sensation* which co-exists with its activity; and 3rdly, in relation to the *acts* to which it prompts. The sensation cannot be defined, but must be felt; and no creature destitute of an organ can ever attain to a knowledge of the sensation it produces.

In the case of Benevolence, the object which excites it to action is the pleasure or pain of other sentient beings. Whenever this idea, which is one of the clearest we possess, is pre-

^k In consequence of the vague and undefined notions which have hitherto prevailed in this department of science, our language is not yet provided with words, the use of which being restricted to *one* class of sensations, define that class *exclusively*.

^l More distinctions might be drawn, but not being essential to my argument, I content myself with the foregoing.

sented to it by the intellect, the organ, by the "law written on its nervous pulp," becomes active, and with this action is conjoined a specific sensation, pleasurable or the reverse, according as the idea conceived by the intellect relates to enjoyment or suffering. Nothing can be more erroneous than the notion that the *desire* which ensues—so to *act* as to prolong or heighten the enjoyment of others, and remove or lessen their suffering, (and which constitutes the true *function* of the organ in the same way as a reflex *action* constitutes the function of the spinal cord), is *produced* by the *consideration* that the former will heighten the pleasurable emotion experienced by self, and the latter remove the painful one.

Even the most selfish men perform occasionally a kind action, to which they are not prompted either by the view of present pleasure or future advantage; and though as men are at present constituted (with the basilar region of the brain greatly preponderating in size over the coronal), the selfish feelings have a great preponderance over the philanthropic, nothing is easier than to conceive a race of beings with the proportions of these parts of the encephalon reversed, and the relative strength of the two classes of feelings reversed in accordance. The metaphysicians of such a people, if they allowed themselves to be guided by considerations analogous to those which have blinded ours, would assert that man took care of himself not from a simple *selfish* instinct, but from the benevolent consideration that if evil befel him the circumstance might occasion pain to others.

Dr. Carpenter expatiates largely on the value of comparative anatomy, and the comprehensive and profound views of the nervous functions to be obtained by its study. In his opinion it is an infallible guide by which results obtained by other methods of investigation are to be tested and valued, and to the authority of which all other modes of research, and particularly the limited one of comparing size with energy of function in a single class, must succumb. Dr. Carpenter can pass no eulogium on comparative anatomy in which I am not ready to concur, for no one is more impressed with the uniformity which reigns amidst the diversity of nature—the profound analogies which pervade every department of her works. I cannot however acquiesce in assigning that *exclusive* authority to comparative anatomy which he does, and still less to the *comparative anatomy of the present day*. In my view, as every fact in science must harmonize with every other, certain knowledge acquired by the comparison of energy with size in a single class, may quite as legitimately be used to check the inferences of comparative anatomists, as the

established principles of their science may safely be employed to rectify notions too hastily adopted from observations based on the former method of research. As Dr. Carpenter complains of phrenologists discarding the authority of comparative anatomy when it interferes with their doctrines, so I complain of his discarding their doctrines where they are opposed by the dicta of comparative anatomists. The whole question resolves itself into one of balance of evidence, and where it appears to me to be all on one side, Dr. Carpenter gives the preference to the opposite scale.

Did we possess a *perfect* system of comparative anatomy, and a *perfect* system of the psychology of the lower orders of animated beings, we should have ready to our hands a mass of materials from which a stable physiology of the nervous system of animal life might be easily constructed. Nothing however can be more narrow and limited than our information on these particulars. Of comparative psychology our utmost knowledge amounts to little more than vague conjectures founded on the uncertain basis of analogical inferences from our own consciousness; and as to comparative anatomy, every successive writer on the subject overturns propositions stated as facts by his predecessor. If the nervous fibres could be as readily and surely traced and identified as the threads in a mass of tangled silk made up of skeins of different colours, then Dr. Carpenter's implicit reliance on the assertions of comparative anatomists would be much more rational. Is it not however notorious, that as a general rule every writer on an organ gives an anatomy which agrees with his own theories as to its function? Have we not at the present day half a dozen different anatomies of such a prominent subject for investigation as the spinal cord? "Of the portions of the roots which are continuous with the fibrous columns," it is stated by Sir C. Bell "that the anterior fasciculi pass to the anterior columns only, and that the posterior are restricted to the lateral columns. On the other hand, Mr. Grainger and Mr. Swan maintain that both sets are connected with the lateral columns only; the anterior and posterior lateral fissures definitely limiting the two roots. Perhaps both these statements are rather too exclusive. The anterior roots would seem to have a connection with both the anterior and lateral columns; and the posterior cannot be said to be restricted to the lateral column, some of their fibres entering the posterior division of the cord." (*Carpenter's Physiology*, p. 127.) Nothing certainly can be cooler than the mode in which Dr. C. disposes of the authority of Mr. Grainger and Mr. Swan: he does not say my *dissections* have led me to a

different conclusion, but simply, "the anterior root would seem to have a connection," &c.; which means (being interpreted) *my* physiological notions require such an anatomical connection. It is only phrenologists then, it appears, who are expected to bow submissively before the dicta of anatomists, and abjure their principles the moment they clash with the former. Dr. C. possesses the privilege of exemption from the rule he imposes on others.

Serres seems to be a favourite authority with Dr. Carpenter, and he would doubtless deem a statement of his quite sufficient to knock down a phrenological theory. Literary anatomists and physiologists however are quite at the mercy of the authorities they consult, and having no other means of judgment, are decided by the plausible tone of assumption and confidence which some know so well how to assume.

To enable my readers to judge of the very little reliance which can be placed on even the positive statements of physiological writers, especially the antiphrenological ones, I here annex a few of the anatomical blunders of Serres,^m noticed and refuted by Gall, and now universally exploded.

"That the functions of the white and grey nervous substances were convertible, either being capable of performing all the functions of a nervous system.

"That in the invertebral animals there is no grey matter, and that their nervous system is formed exclusively of white substance.

"That the spinal marrow presented no swellings formed by the grey matter at the insertions of the spinal nerves.

"That the external root of the olfactory nerve is inserted by one of its bundles in the outer rays of the anterior commissure.

"That the olfactory nerves and fifth pair increase in volume as that of the brain decreases.

"That the spinal marrow and the corpora quadrigemina are so rigorously developed in the ratio of each other, that the size of the first being given in any class or in any of its families, the volume of the latter may be determined with precision.

"That in all classes except that of reptiles the median lobe of the cerebellum is developed in the direct ratio of the quadrigeminal bodies.

"That the mole has no optic nerve.

^m Un des ouvrages qui aurait dû fixer le plus l'attention des anatomistes, puisqu'il avait pour lui l'avantage d'avoir été couronné par l'Institut de France, celui de M. Serres, est de tous ceux qui ont été publiés sur ce sujet, celui qui nous paraît devoir inspirer le moins de confiance. L'anatomiste qui a étudié le système nerveux cérébral sur la nature, ne sait, en lisant cet ouvrage, de qui il doit le plus s'étonner, ou de l'assurance de l'auteur dans sa manière de présenter les faits anatomiques servant de base à ses propositions, ou de la fausseté de ces mêmes propositions rapprochées de la nature ou des dessins donnés par l'auteur lui-même. *Traité de Phrénologie Humaine et Comparée.* Par J. Vimont, p. 100.

"That the *corpus callosum* is proportionate to the annular protuberance."

If the antiphrenological physiologists could but light upon such a batch of blunders made by a phrenologist, how they would regale themselves; what a crowing of exultation and trumpeting forth of triumph would be heard on all sides. After the preceding sample of the degree of dependance to be placed upon the statements of an authority (?)—statements made too, it must be remembered, not casually nor hastily, but deliberately put forth in opposition to those of Gall, and professedly founded on personal observation, my readers will be better prepared to judge of the weight that should be attached to the assertion of Dr. Carpenter founded on the statements of Tiedemann and Retzius, that the cerebrum of the bird is the representative of the anterior lobe alone of the human brain; that the middle lobe is first developed in the lower mammalia, and the posterior lobe restricted to the higher. Statements of this extraordinary character put forth from time to time most conclusively demonstrate that something beyond good eyesight is required to see correctly in anatomy, and that no amount of carefulness in observation constitutes an individual an authority in matters of inference.

Such is the deluding influence of words, that probably if this portion of the brain had been denominated the lobe of the social instincts, and the term posterior never connected with it, the present controversy would never have arisen. In my opinion, there never was a more rash and presumptuous assertion made than the preceding, nor one which betrayed a greater amount of superficiality and ignorance on the part of its authors. Dr. Carpenter, after a sneer at "*phrenological luminaries*," goes on to observe, "Now although there is no external line of separation between the middle and posterior lobes, such as exists between the anterior and middle, there are two points of internal structure which afford as definite an indication as can be required: these are, the development of the posterior cornua of the lateral ventricles, and the situation of the hippocampus major."

Let us examine the amount of wisdom displayed by the *physiological luminary*. Granting, for the sake of argument, what (since the posterior lobes may extend more or less forward laterally) I cannot admit, viz., that the posterior cornua indicate their inferior boundary, how is it possible that Dr. C. can predicate their size, unless he be able (which he does not even pretend to be) to determine likewise their superior boundary? Since when has it been possible to ascertain the

size of a structure by being acquainted with the position of one end of it? To make the excessive absurdity involved in Dr. Carpenter's assertion palpable and obvious to the reader most ignorant of anatomy, I will employ the following illustration. Suppose the hind-boot of a coach to be extended over the roof into the fore-boot; next suppose the cavity thus formed to be divided within into three compartments, no marks of such division being visible externally, his proposition, is, that all that is necessary to discover the size of the hindmost cavity, is, to measure how far it projects behind the body of the coach.

Now there is no doubt but that the posterior lobe in animals is carried further forward on the superior surface of the brain than in man, for the convolutions in which their brains first become most defective, are those seated in the central portion of the coronal region, and the absence of these occasions the anterior edge of the posterior lobe to be advanced further forward to supply the deficiency. Analogous results, but minor in degree, are presented in different individuals of the human race; the superior portion of the anterior lobe is often carried further backward, and the superior portion of the posterior lobe further forward, with reference to their respective basilar portions, from a similar cause. These are points, however, on which Dr. C. is no doubt profoundly ignorant.

The fact is that in the lower vertebrata the cerebral ganglia and organs of sense are placed in a right line with the spinal marrow, whereas, in man they are placed at right angles with it, and as we descend the animal scale, the change from a right angle to a straight line, is gradually effected by drawing the medulla oblongata and other cerebral ganglia gradually downwards and backwards. This is the whole mystery of the matter, and the reason why anatomists attending to size, form, and relative position, instead of anatomical connection and function, have fallen into this great error. Where the thalami optici and corpora striata, the ganglia of the cerebral lobes are, there will the lobes be also. A bird or quadruped with its intellectual organs in the poll, would be as great a monster as one with eyes in its tail,—in fact just a similar violation of the harmony of nature.

Dr. Carpenter, finding in the assertions of anatomists with regard to the absence of the middle and posterior lobes in the lower animals, countenance for his doctrine of the seat of the instincts, observes,

"Now the cerebrum of a bird is *not* like that of a mammal as a whole, but can be compared only to its anterior lobe; and it seems

absurd, therefore, to be looking there for the organs of Combative-ness, Philoprogenitiveness, or Secretiveness, which belong to the posterior and middle lobes. What then becomes of all such organs? We reply that it is much more easy to conceive of their having no existence in the bird's mind as propensities, the actions referred to them being simply consensual, than it is to suppose that the uniformity which we every where see in nature is so egregiously violated."

Egregiously violated indeed! if there be a shadow of truth in this doctrine, which, however easy to conceive, appears to me the most improbable of conceptions.

Having shewn the reliance or rather non-reliance to be placed on the assertions of anatomists with regard to the middle and posterior lobes in animals, I may safely leave the superstructure erected by Dr. Carpenter to fall with the foundation. Before I quit the subject, however, I must bring under his notice a personage in whom he will doubtless recognize a great authority, viz., the celebrated hen of Flourens, whose martyrology has formed such an inexhaustible storehouse of anti-phrenological arguments. If the ganglia could not bestow on this unfortunate hen sufficient instinct to preserve her own life, by eating when food was placed before her, is it probable they suffice for causing birds to fulfil all the duties of paternity?

I have a collection of between seventy and eighty casts of bird's brains which I have formed gradually during the last two years, and, after attentively examining them, I have come to the conclusion that they are more lobulated than the human brain, and that the right point of view to consider them in, is, as presenting an example of that *tendency* of the coalesced ganglia of the higher orders of animals to separate into distinct parts in the lower; forming in fact, in this respect, a link between mammalia and inferior classes. An anterior lobe is plainly discoverable in each, and when I see that this bears a relation to the intelligence of the birds, being strikingly larger for instance in the Corvidæ than in the Falconidæ, I can scarcely refrain from a smile at the assertions of the anatomists and the credulity of Dr. Carpenter.

In his eagerness to make the thalami and corpora striata the ganglia of the sensory nerves and the seat of the emotions, Dr. C. altogether overlooks the circumstance that their development always bears a ratio to that of the hemispheres, a circumstance decisive in my opinion of their function being not independent but mediate. Any opinions passed on their function, in the present state of our knowledge of the nervous system, can only be regarded in the light of conjectures, but as the conjectures of one individual, even when erroneous,

often serve to suggest a valuable idea to the brain of another, I shall make no apology for introducing a few speculations of my own, premising that I do so with a great distrust of their accuracy, and with the full assurance that some will prove unfounded, and others require much rectification.

I have never yet seen generally admitted what I believe to be a uniform and most important law,—viz., that each organ performs two offices, one relating to animal, the other to vegetative life. Thus, the animal function of the tongue, is taste; its vegetative, that of purveyor to the muscles of deglutition; its ganglia, the ganglion of the lingual branch of the fifth and the ganglion of the glosso-pharyngeal. The animal office of the pituitary membrane is smell; its vegetative, that of guardian of the portals of respiration; its ganglia, the olfactory and the vesicular matter at the termination of that branch of the fifth pair distributed to it.

When we consider the facts which recent researches have revealed respecting the power resident in light, to which the term *actinism* is applied, we can be at no loss to conjecture a vegetative function for the eye, viz., that of assisting in the supply of this element needful for the various vital-chemical processes of organic life. The posterior pair of quadrigeminal bodies are not improbably the ganglia of the portion of the optic nerve devoted to this function, and whose peripheral organ must be regarded as the tunica choroidea, in the same way as the retina is the peripheral organ of the portion devoted to vision, and whose ganglion may be the anterior pair of quadrigeminal bodies. The large size of the optic tubercles in birds, whose covering, feathers is scarcely permeable by light, and their small size in man whose skin is more accessible to its rays, and more highly organized than that of any other animal, are curious facts.

Nothing to my mind is more radically vicious in principle and unsound in theory, than the practice which has lately been adopted, and is now become universal, of designating the cerebral hemispheres a ganglion. Ganglions are central organs, and the cerebral hemispheres are peripheral. Ganglions have their vesicular matter in the centre, and their exterior composed of white fibres. The cerebral hemispheres have their vesicular matter on their surface, whilst their white fibres are interior. In short, I view the hemispheres as the analogues of the senses, and *not* as ganglia; the vesicular matter on their surface as analogous to the vesicular matter at the peripheral expansion of the nerves of special sense; and their white fibres as the analogues of the white fibres of the latter. The corpus striatum I conjecture to be the gan-

gion of the animal function of the hemispheres, those performed with consciousness; and the thalamus opticus, the ganglion of the vegetative, performed without consciousness; whilst I regard the corpus callosum not as a commissure, but as a decussation formed by the fibres from each hemisphere crossing to enter the ganglion of the opposite side.

The necessity of a most intimate connection between the functions of vegetative and animal life, by means of which the two can act and react upon each other, is most obvious. The principle on which it is founded seems to be, that the activity of every animal organ stimulates the action of those vegetative processes subservient to it,^a or which minister to its wants, and thus contributes to the realization of its own desires; whilst the vegetative organs have the power of repressing the activity of animal ones when such activity would be prejudicial to their operations, and of stimulating them to action when their activity is necessary for the conservation of the species. Disease I conceive, except in the case of poison, arises from this system of mutual checks being out of order. It is probable that no portion of the cerebral hemispheres enters into action without discharging a portion of nervous fluid or vital electricity (of a specific character, varying with the locality of the surface which secretes it), which is *distributed* by the portion of the thalamus receiving it to the organ it represents; and that thus every emotion chronicles its existence in an effect on the organs of vegetative life. When the vesicular matter on the surface of the hemispheres acts with such intensity as to consume vital electricity faster than it is formed by the combustion of the carbon of the blood in the capillaries, the action of the heart and lungs becomes accelerated, in order to furnish a more rapid supply. A familiar illustration of the action of the vegetative system on the animal is afforded by the indisposition to exercise after a full meal. The most remarkable instance^c I have ever heard of the power exercised by the animal functions over the vegetative, is the case of an Indian man who suckled an infant whose mother died in the woods; the intense action of Philoprogenitiveness having caused the mammary glands to take on the action of secretion. Philoprogenitiveness, sympathizing with the condition of the uterus, has its activity increased just before the termination of gestation. I have seen a cat at

^a Thus Alimentiveness probably stimulates the secretion of gastric juice. From numerous observations, continued now through a period of many years, I feel warranted in stating that in the human race, when this organ is very deficient, the digestive powers are always feeble.

^c See many cases of unusual suckling in *Elliotson's Physiology*, p. 839—40.—*Zeist*.

this period caress the kitten of another that she had previously been accustomed to beat, and I believe I have recognized facts of an analogous character in the human female.

A second channel through which a portion of the vital electricity, fluid, or ether generated by cerebral action unconsciously flows off, is the muscular system, producing natural language; and the ganglion of these hemispheric fibres is probably the anterior portion of the thalamus. Belonging to the class which perform their functions without consciousness, fatigue is of course not experienced from the action of this system; in which particular it resembles the reflex or true spinal, a resemblance which may be carried further, the habitual *carriage* of the body being analogous to the usual state of *tonicity* of the muscles, and the *movements* of the head and body, which result from vivid emotions, to reflex *acts*.

The third channel through which a specific species of nervous fluid or ether is propelled by the action of the vesicular superficies of the hemispheres, is that which conveys those impressions which constitute its animal function, and which upon reaching the central organ of Consciousness, ARE emotions and perceptions; and the ganglion of this division of the fibres of the hemispheres I conjecture to be the corpus striatum. The existence of a central organ of Consciousness seems to me an absolute necessity, and many circumstances concur to point out the tuber cinereum as its seat. It gives birth to the sense of existence and feeling of personal identity, to which appears always to be attached a capacity for experiencing pleasure and pain. Seated in the centre of the brain, the functions of the ganglia of the senses (including those of the hemispheres) may be deemed to consist in collecting as into a focus the sensations (perceptions and emotions inclusive) which it is the peculiar province of each to furnish, and holding them before it; and thus rendering it omnipresent as regards the operations of each. The volitions and consequent actions—proceeding from—(*qy.* co-existent with) the impressions made on Consciousness by the emotions and perceptions, are as certainly determined by the “laws written on the nervous pulp” as a reflex act; the only difference being, that whilst the latter follows immediately on the reception of its stimulus, the former is suspended—in those cases where the desire to act of one organ is opposed by the desire to refrain of another—till a process termed deliberation is gone through. This consists in an examination by the intellect, at the call of Caution,^o of the probable consequences which will accrue from the contemplated act to the different organs interested in the debate. Caution, at length satisfied on this

^o More properly, Love of Security.

head, removes its embargo, and a decision or volition comes into existence of an energy proportionate to the degree in which the impulses of the organs, for the act, preponderated over those, against the act: the measure of its power being, in fact, the overplus of their energy remaining after having neutralized their antagonists. Thus by a law of our mental being, preponderating desire is the antecedent to volition, and volition the necessary sequent to preponderating desire. A decision to pursue a particular line of action once made, another organ (Firmness) comes into play, and in any future re-deliberation on the same subject, throws all its weight into the scale in favour of persisting in the resolution once taken, and thus prevents vacillation.

The numerous patches of vesicular matter in the cerebral crura may be the places where ideas of muscular *acts* are translated into muscular impulses. Motions requiring the combined action of numerous muscles are yet regarded by the mind but as units or simple acts, and hence it is quite certain that there must be interposed between the fibre or fibres through which the volition is first issued, and those by which it eventually reaches the muscle, a tract of vesicular matter, which, receiving from the mind the mandate to execute a certain action, propels in obedience a stimulating impulse of the requisite intensity to every muscle required to enter into play. Only a limited number of movements specifically distinct can be made by the muscles of the human body, and an independent portion of vesicular matter seems necessary for each. The circumstance that the actions of different muscles, after being repeatedly performed voluntarily, become associated together, so that a succession of regular motions can follow one another with unerring precision quite automatically, without any conscious effort on our part, (as in playing a musical instrument for instance,) is one of the greatest marvels of nervous action. The mechanism by which this is accomplished will most likely for ever remain beyond our ken, but the seat of the phenomena is probably either the crura cerebri or corpora striata. The association of different classes of ideas with reference to contemporaneousness or immediate succession, and by which the recurrence of one of an assemblage or series summons up the rest, is a phenomenon of a similar character, and not to be referred to any separate faculty or organ of association, as was done by the old metaphysicians, but to laws regulating the action of the nervous matter in which the ideas are formed, by virtue of which those changes in its state (constituting sensations) which have once occurred together, have a

tendency afterwards to recall each other. The various fields of view contemplated by the eye, seem to form series of daguerreotype pictures in the nervous matter, capable of being recalled as wholes by an appropriate stimulus transmitted by an act of volition directed to this end. In this way we are able to reply correctly to questions, the answers to which, considered as facts, we were before ignorant of. Thus we may be asked the number of spots on the back of an absent dog, and although we may never have counted them or thought on the subject before, yet by summoning his image before the mind's eye we are enabled correctly to resolve the query addressed to us. This species of mental capacity has never received the attention it deserves; by means of it various kinds of knowledge being as it were written down in a book, and stored away by the mind to be made use of when occasion demands.

The science we call chemistry, is the body of laws which regulate the combinations of inorganic matter. Physiology may be defined to be *vital chemistry*, or the body of laws which regulate the combinations of organic matter. As all chemical action is nothing but the motions which produce fresh combinations of inorganic matter, so *all vital action is nothing but the motions which produce fresh combinations of organic matter*. The step from the inorganic to the organic world, is marked by the simple elements of matter passing under the dominion of a new *force* more powerful than chemical affinity, by virtue of which they enter into ternary and quaternary combinations. There can be no doubt however but that this new *force* exhausts itself in its struggle against chemical affinity, so as to require to be constantly renewed by nutritive matter. The vital principle or force is therefore elaborated by a certain combination of the simple elements of matter. The essence of vitality is then the power inherent in a certain form and arrangement of matter when placed under the requisite conditions regarding caloric, light, and electricity, of elaborating out of the simple elements of matter the vital principle, that is, a force similar to itself. Of all the agents which influence the affinities of the elements of matter and produce changes in their combinations, none is so powerful as *caloric*, and its power affects the organic equally with the inorganic world.

At a very low stage in the vegetable kingdom we meet with a contractile tissue (the analogue of the muscles in animals) possessed of *irritability*, that is, capable of being excited to movements by stimuli. As long as bodies are homogeneous in structure, or only such outward portions as external stimuli impinge upon are required to respond to the

impression, no necessity seems to exist for the intervention of any *agent of distribution*. When however the contractile tissue or apparatus of motion becomes concentrated and localized, the necessity of a channel of communication between the stimulus-receiving surface, and the tissue whose function it is to contract in answer, becomes obvious. This gives us a clear idea of the functions and essential parts of the reflex or true spinal nervous system; viz., a *surface* for the reception of physical or chemical stimuli, and the propagation of a vital stimulus in reply; *fibres*, the conveyors of this stimulus to a central organ or *ganglion* whose office it is to arrange and distribute the impressions through another set of fibres to the muscles required to respond. The anatomical distinctness of the true spinal system, the centres of which terminate at the medulla oblongata, proclaim that a line of demarcation may be drawn between its functions and that of the various organs of the nervous system seated above it; and its peculiar office, the production of motions without consciousness in obedience to external stimuli, finds a parallel in the automatic movements of plants.

The passage from the vegetable to the animal kingdom is marked by the presence of nitrogen in the organized tissues of the latter, and by their only being able to employ as food organized products previously elaborated from the mineral kingdom by vegetables. Probably the transition is also marked by the birth of consciousness, and the superaddition to the true spinal or unconscious system, of a sensi-motor nervous system, in which *sensations* are the exciting causes of motion.

The first requisite of such a system in creatures possessing the faculty of locomotion is the sense of the *being* or *existence* of the different parts of the body, accompanied with a sense of their gravity, which capacity for reasons to be subsequently assigned, I locate in the central portion or vermiform process of the cerebellum, placing in the anterior lateral portions of the organ, the sense of temperature, and in the posterior lateral (which constitute the large cerebellar lobes in man), the sense of touch. The ganglion of taste and the auditory and optic ganglia must, I think, be regarded as an advance in organization upon the preceding. It may be asserted, and I believe must be admitted, that the *acts* we term consensual are no *proof* of consciousness; it seems, however, to be the general object of nature to bestow sentience on matter, and the fact that her plan appears to have been to have progressed to the higher ranks of being, by almost imperceptible gradations, is in favour of automatic or unconscious acts being linked to volitional by an intermediate class. Destitute of memory or any power of retaining or comparing sensations,

the consciousness of this class is made up of a series of sensations. Attracted towards certain objects which chance throws in their reach, they make certain motions to attain them in obedience to this law of attraction, and pleasure ensues; animals endowed with a brain, on the other hand, seek objects in consequence of having an *idea* of the pleasure to be procured by their attainment.

All our divisions of nature are rather arbitrary than real, and however well marked may be the distinction between the lowest objects in one class, and the highest in the class above, we shall find between the highest in the former division and the lowest in the latter, the closest relationship. This many-sidedness of the *rapprochements* of nature, is nowhere more strikingly apparent than where attempts are made to classify the different functions of the cerebral hemispheres or brain-proper. Nevertheless I am of opinion that without descending to a minute classification they may be advantageously considered under three divisions.^p *First*: Perceptive faculties, whose food is impressions received from the ganglia of the external senses, which impressions are analyzed into a variety of qualities. Light, for instance, into colour, sound into music. The impressions of the gustatory ganglion, which probably in animals without a cerebrum give rise only to bland or acrid sensations, into an infinite variety of flavours, &c. Form, size, distance, relative position, number, are appreciated and remembered.

Secondly: A class of propensities, desires, or emotions, whose stimulus is the perceptions of the first class; when these reach them they excite a desire to act in a certain manner accompanied by a specific feeling or emotion, as when a buffalo takes to flight at the sight of a lion, and experiences at the same time an emotion of fear. Such an action is properly termed voluntary, although it is quite certain the buffalo could not act otherwise unless its nature were altered. This class may be considered under two heads; first, *selfish* organs, whose sole object is the preservation of the individual; secondly, *social* organs, which cause the individual to contribute to the welfare of others. The unanimous feeling of mankind assigns to the higher organs of this latter class, which occupy the coronal surface of the head, a rank and dignity to which the preceding or selfish class can lay no claim. The lowest organ of this class being Philoprogenitiveness, it is probable that the class as a whole is wanting in animals which do not nourish their young.

^p I omit any analysis of the higher reflective faculties, as being rudimentary in animals, and non-essential to my argument.

By far the greater number of the actions prompted even by the brain-proper, are *instinctive*, that is independent of experience, association, or any reasoning process. No sooner are certain specific features recognized in an external object by the perceptive faculties, than by "the law written on the nervous pulp" an emotion and desire to act is excited. Thus the fear felt by a rabbit the first time it sees a weasel, arises from no *conclusion* drawn by intellect as to its ferocity from the structure of its teeth and body—from no *association* of its previous appearance with the cries and disappearance of a comrade—from no *experience* of its hostility. Knowledge and habits derived from reason and experience, are gradually formed by association into instincts, and even transmitted to offspring. By which law the nature of animals is capable of being changed within certain limits, and they enter the world with a peculiar adaptation for existing under the same circumstances as their parents. The instinct inherited by the offspring of well-trained hunting dogs is a good example of this law. Another is afforded by the wildness of birds in districts long inhabited by man, contrasted with their absolute indifference to his approach in islands where he has never taken up his residence. Old birds of the corvidæ genus know by experience the danger to be apprehended from a gun, and will suffer an unarmed individual to approach much nearer to them than they will permit one bearing a fowling-piece to do. The transmission of acquired instincts to progeny is a department of natural history which has not hitherto received half the attention it deserves.^q Even the influence of one vivid impression on the parent during gestation is often manifested in the offspring, and the most trivial incident or *rencontre* occurring to a pregnant woman may cause the child all through life to experience as much loathing and disgust at the sight of a mouse, as mankind in general feel towards a toad or a serpent.^r

In concluding this very brief and imperfect survey of the functions of the nervous system, the question presents itself, in what way is the pre-existence of the lower orders necessary to the advent of the higher. Vegetable life doubtless existed on this globe millions of years before the presence of even the lowest animal, and from the commencement of animal life many millions of years probably elapsed before the lowest vertebrata made their appearance. Countless ages must have intervened from this period before the advent of man, whose appearance on the earth, even if placed a million of years

^q See striking illustrations in *Elliotson's Physiology*, p. 1129—1132.—*Zoist*.

^r See the same Work, p. 1117—1124.—*Zoist*.

back, is of most recent date when considered in relation to the time that must have been occupied in the consolidation, deposition, and arrangement of the strata on the earth's surface. The earth probably receives more light than she reflects, and thus the matter on her surface may gradually become impregnated or combined with a greater quantity. Solid land slowly upheaves its head above the deep, by the combined agency of the volcano and the continent-founding coralline. Soil and climate gradually become changed and ameliorated, and fitted for supporting the existence of higher races. But is it *only* by producing physical changes that the pre-existence of lower orders is a necessary preliminary to the advent of higher. As the lower tribes of animals require for their assimilation matter previously organized by vegetables, may not the higher require certain sentient principles, products of the organization of the lower, for the development of their superior intelligence. Leaving out of view *progress* by the appearance of new races, some law must govern the unquestionable increase in intellectuality of the human race.⁹ There is deep philosophy in the lines of Tennyson,—

“For I doubt not through the ages one increasing purpose runs,
And the thoughts of men are widened by the process of the suns.”

Though I am fond of indulging in speculation and a great supporter of its utility, no one can be more impressed with the necessity of rigorously preserving a broad line of demarcation between the conjectural and the ascertained. Within these two years I have examined nearly three hundred brains, comprising those of most of the vertebrata resident in the British Isles, and ascertained the relative weight of the cerebrum and cerebellum in each, with a view to determine the function of the latter division of the brain. On the present occasion I must content myself with giving a very brief outline of the results of these researches, but it is my intention to take an early opportunity of laying them more in detail before the readers of *The Zoist*, accompanied with a table of weights.

About eight years ago my attention was arrested by the extraordinary sensibility to pain manifested by an individual possessing a large cerebellum; recalling some similar cases, the possibility of a connection between the large organ and the acute feeling struck me, and I examined the opinions of physiologists with regard to the function of this part of the brain. Finding my idea discountenanced by their writings,

⁹ Those who demur to this proposition are requested to consider the indisputably inferior organization of numerous savage tribes gradually becoming extinct.

and influenced also by the opinions of Gall, and still more by the cases that had come under my own observation indicating the connection between a prominent cerebellum and the sexual feeling, I concluded that the co-existence of the large cerebellum with acute sensibility was adventitious. Six years elapsed, when another case fell under my notice which induced me to reconsider the subject, and it now occurred to me that the sexual instinct was so entirely an affair of sensation, that a relation between its intensity and the size of the central ganglion of the sensory nerves was to be expected. When I came to examine the brains of the lower animals, and found the cerebellum to consist of three portions anatomically distinct, and bearing no sort of ratio in size to each other, I at once abandoned the idea of its being a single organ having only one special function, and asked myself the question, to which division tactile sensation, if located in the cerebellum, most probably belonged. My first ideas on the subject having been derived from observations on man, in whom the lateral lobes constitute its chief bulk, what little weight attached to them was in favour of this division being the seat of the function in question, and the superior sensibility of the skin in man seemed corroborative of this inference.

The numerous observations I have since made on the brains of the inferior animals, all so completely concur in shewing the relation between the size of the great lateral lobes of the cerebellum and the development of the cuticular system of nerves, that I consider the connection between them quite *established*. Nature has kindly presented us with some animals which seem formed for the solution of physiological problems, and whoever would obtain a clear insight into the functions of the cerebellum should study the development of this organ in the cetacea, birds, and the cheiroptera.

The cetacea present, of all animals, the greatest development of the cuticular system of nerves, which more or less pervade the whole of the layer of blubber interposed in this family between the skin and the muscles, and form a network of extreme minuteness on its external surface. In connection with this organization let it be observed, that the sense of feeling in these animals is so acute, as to enable them to communicate with each other at long distances by the vibrations of the water; and I have been assured by an individual who once saw an embayed porpoise put to death by some fishermen, that the cries of the animal when wounded were heart-rending, and conveyed the idea of most

acute suffering. In the porpoise the size of the cerebellum, as compared with the cerebrum, is as 1 to $2\frac{1}{2}$, and its unusual bulk is entirely occasioned by the enormous development of the great lateral lobes, which, equal in absolute size to those of man, far surpass his or any other animal's in the proportion they bear to the other nervous centres. Pursuing a living prey, and obliged to seek the surface at short intervals for air and thus lose sight of it, without this extraordinary development of cuticular sensibility to give it cognizance of the motions of the object of its chase, it would lose all knowledge of its locality at each breathing time.

In striking contrast to the cetacea stand the class of birds; clothed with feathers, any extraordinary development of sensibility in the skin would be superfluous; thin and membranous, it presents scarcely a trace of nerves, and in conformity we find that the development of the lateral lobes is quite rudimentary. The median lobe or vermiform process, however, attains in this class to an unusual magnitude, so much so, that the weight of the cerebellum as a whole, compared with that of the cerebrum, is not inferior to that of mammalia, and varies from 1 to 4, to 1 to 12. In considering the question as to what power birds possessed in a degree as commensurately greater than other vertebrata, as the median lobe of their cerebellum surpassed that of the latter in size, I was struck with the important fact of their capacity for traversing and supporting themselves in an element of a specific gravity so much less than their bodies. To do so must require great muscular power, and an extremely delicate sense of resistance when the ease and grace of motion are displayed, which characterize the flight of many birds. In the crow, whose motions are neither rapid nor elegant, the weight of the cerebellum is $11\frac{1}{4}$ grains, and that of the cerebrum 129, whilst in the common gull, who floats through the air in graceful curves, skims with rapid wing the surface of the waves, or sports with the wind in rapid zigzag starts, the weight of the cerebellum is 14 grains, with a cerebrum of only 63. The swift sparrow-hawk possesses a cerebellum of $6\frac{1}{2}$ grains, and a cerebrum of $36\frac{1}{2}$; the slow grey owl a cerebellum of 9 grains, and a cerebrum of 120. And in the swallow tribe, who live on the wing, the cerebellum reaches, proportionately to the cerebrum, the largest development to be found in the class, being as 1 to 4.

In man, during life, it may not be easy in many cases to determine the proportionate development of the median lobe, as compared with the lateral; when however the whole occiput is narrow and contracted, we cannot err in concluding the

median lobe to be deficient, and in all such cases I believe myself to have detected a certain ungainliness and angularity of motion. Such individuals cannot dance with grace, and are poor equestrians, skaters, &c. These and various other considerations which I will not now detail, have led me to the belief, that the median lobe of the cerebellum is the ganglion of the nerves of muscular resistance, conveying a sense of the position of the extremities and the centre of gravity. The centre in fact of a system of sensi-motor nerves, playing as important a part with regard to the function of locomotion, as the true spinal or reflex plays with regard to the functions of ingestion and egestion. Habit renders muscular acts so automatic, that we are almost totally unconscious of the great extent to which they are stimulated by the sensation of resistance, and how necessary this stimulus is to their long continuance without fatigue. When a boy, just learning to swim, I was very much puzzled by the fact that after swimming across a small pond which I could cross in about twenty strokes, I felt fatigued. The expenditure of muscular power must, I felt sure, be very small, yet the fact of exhaustion being felt was equally undoubted. The explanation of the phenomenon I never knew till my recent researches revealed it. Some little allowance must be made for the motion being a novel one, but the grand source of the fatigue was, that the sensi-motor nervous system being unused to respond to a stimulus offering so little resistance as water, the whole task of keeping up the motion fell upon the volitional. If a strong man capable of walking forty miles in ten hours without resting, were suspended by a belt placed round the waist, and required to go through the action of walking; although moved forward artificially through the air at each stride so as to keep the centre of gravity in a proper position in advance, yet I am convinced he would be thoroughly fatigued with ten minutes of this exercise.

Had any doubts remained in my mind of the correctness of my view of the functions of these two great nervous centres, the central and median lobes of the cerebellum, they would have been dispelled by an examination of this organ in the cheiroptera, or bat family. These insectivora combine in one, the large lateral lobes of the cetacea, and the large median lobe of the bird; and in harmony with the views of their function just given, display the acute tactile sensibility of the former class, united to the agility and delicate sense of resistance of the latter. Spallanzani found that bats when blinded avoided obstacles in their flight with the greatest precision, and this in places to which they were strangers. They

flew with rapidity through apertures only just large enough to allow of their passage, and even avoided small threads stretched across the apartment; thus exhibiting an example of exquisite tactile sensibility, the only parallel to which is among the cetacea. The cerebellum in the bat is, proportionately to the other nervous centres, larger than in any other animal. In the common pipistrelle, the average (drawn from six) is, cerebellum .96 of a grain, cerebrum 1.78.

With regard to the vegetative function of the great lateral lobes, various considerations, which want of space must prevent my now enumerating and explaining, have led me pretty confidently to conclude that it presides over the secretion of the sebaceous glands, and probably also over that of the testes, the tubular structure of which proclaim them to be allied to the sebaceous system. The ganglion of the nerves of temperature I conjecture to exercise an influence over the secretion of the sudoriferous glands, and the action of the hair follicles. Every ganglion may be regarded as a gland secreting the appropriate nervous stimulus for the system of nerves over which it presides. The median lobe of the cerebellum, besides secreting the nervous energy which is expended by its nerves in producing muscular contraction, doubtless exercises a most intimate control over the action of the heart and lungs, every muscular effort necessitating increased action of these organs to supply the waste occasioned by it.

The preceding views, if well founded, are evidently capable of many important applications to surgery, pathology, and therapeutics. The great power to be exercised over disease by acting on the nervous centres through the cuticular system of nerves, is not yet adequately appreciated, though ultimately destined in my opinion to replace to a great extent the present system of pouring drugs into the stomach. Every one must be familiar with the fact that in surgical operations the shock to the system often bears little proportion either to the importance of the parts wounded, or the state of the general health. In such cases the size of the lateral lobes of the cerebellum will prove a most valuable adjunct to diagnosis. I have known fine athletic men faint from operations that I have seen weakly women bear with comparative indifference. In such parties the development of the cerebellum has been enormous; and whenever this is the case, I would suggest the application of pounded ice to the occiput, and a warm bath to the feet, previous to, and during an operation. The same treatment might be advantageous in lock-jaw, which would seem to arise from an irritation of the lateral

lobes of the cerebellum, produced by pain in the vicinity of the origin of the nerves distributed to the muscles of mastication.

I must defer till another opportunity the statement of the views I have been led to form as to the manner in which the lateral lobes of the cerebellum contribute to the energy of the sexual feeling.^r But it will perhaps be expected that I should give some opinion on the *questio vexata* of the influence of emasculation on the development of this organ. When I read the arguments *pro* and *con* of Mr. Noble and Dr. Carpenter on this subject, I was forcibly reminded of the remark of Gall, who says on a parallel occasion, "It would be difficult for such learned men to have recourse to so laborious a source of true knowledge as observation." At the outset of my inquiries this was the first subject that attracted my attention. Believing each portion of the surface of the body to be represented by a separate portion of the vesicular matter of the great lateral lobes of the cerebellum, all the alteration in the organ which I should anticipate from emasculation, would be a slight diminution of the portion representing the generative organs, and the parts with which they closely sympathize; and on the whole the result of my inquiries is in favour of this conclusion. The diminution however being so trifling as not to counterbalance the congenital variations in the size of the organ which occur in individuals, the point can only be satisfactorily determined by taking the average of a large number of cases. Having procured the brains of six capons, I found the average proportion of the cerebellum and cerebrum to be $6\frac{1}{4}$ grains to $45\frac{1}{8}$. Having previously found the average of six cocks to be $7\frac{7}{8}$ to 44, this appeared to be a very decisive result; but finding, as I extended my observations, a great difference in the size of the parts in different breeds of fowls. I procured the brains of five cocks of the same breed as the capons through the same London poulterer, and from the same town in Essex; these gave a proportion of 7 to $46\frac{3}{8}$, a much less striking difference, but yet strongly corroborative of a certain amount of change. Having removed the right testis from a kitten three days old, I examined the cerebellum at the age of $1\frac{1}{4}$ year, and could detect no inequality on its sides, though having placed it in

^r Da ich glaube, dass die Entwicklung der Seiten-Flügel des cerebellums eine anzeige der Empfindlichkeit der Oberfläche des Körpers ist, so erwäge ich, dass *ceteris paribus*, je grösser ihr Umfang ist, desto grösser wird das Vergnügen seyn welches die Ausübung der Begattung gewährt. Ich glaube jedoch an das Vorhandensein eines Organs des Zeugungstriebes in dem cerebrum, welches das Weib zum Gegenstande der Begierde macht, und auf der unteren Oberfläche des Hintertheiles desselben liegt.

spirit I made it the subject of repeated observations. I may extend the same remark of not being able to detect any inequality in the halves of the cerebellum after unilateral emasculation, to the cases of a ram and a hare. The result of my researches on horses, pigs and sheep, is in favour of emasculation producing a diminution of the absolute size of the cerebellum, but not of its relative size as compared with the cerebrum, the development of the latter organ being quite as much interfered with; which is what I should be quite prepared to expect.

To enter into a detailed refutation of the arguments by which it is sought to prove that the cerebellum is a sort of supplementary addition to the nervous system, an organ as high or higher in the ascending scale than the cerebrum, whose function is the "co-ordination of movements requiring the united action of many muscles," would be foreign to my present purpose, and perhaps superfluous after what I have already stated. Dr. Carpenter observes, "In proportion as the extremities acquire the power of prehension, and together with this a power of application to a great variety of purposes,—still more in proportion as the animal becomes capable of maintaining the erect posture, in which a constant muscular exertion, consisting of a number of most elaborately combined parts, is required,—do we find the size of the cerebellum and the complexity of its structure undergoing a rapid increase. . . . Man surpasses all other animals in the number and variety of the combinations which he is capable of executing, and in the complexity of the combinations themselves. Thus if we attentively consider the act of *walking* in man, we shall find that there is scarcely a muscle of the trunk or extremities which is not actually concerned in it; some being engaged in performing the necessary movements, and others in maintaining the equilibrium of the body, which is disturbed by them." Unfortunately for these ingenious speculations there is such an animal as a porpoise, a sort of animated barrel, which minus "prehensile extremities capable of being applied to a great variety of purposes,"—minus "the capacity of maintaining the erect posture,"—minus *every* feature enumerated by Dr. C. as connected with a large cerebellum, yet possesses the organ more largely developed than any other animal, the bat excepted.

Dr. Carpenter observes, "The peculiar connection of the cerebellum with the sensory ganglia was supposed by Foville to indicate that it is the actual seat of sensation; an idea at once negatived by the entire absence of the organ in invertebrated animals:—" and pray, Dr. C., what becomes of your

idea that the thalamus opticus is the seat of sensation? Will you affirm, or rather have you one tittle of evidence to entitle you to affirm, that the thalamus is developed in a lower stage of being than the cerebellum? Such a notion is a mere piece of complacent assumption, and in the present state of our knowledge, or rather ignorance, of the exact functions performed by the nervous centres in the invertebrata, for any one to undertake to assert that none of the cephalic or thoracic ganglia are the analogues of the cerebellum of the vertebrata, would be much more indicative of folly and presumption than wisdom.

The purely literary scientific man, however adroit in disguising his want of practical acquaintance with the subject of his criticism, rarely succeeds for any length of time in his object; his ignorance will peep out, and often does so in the assertion with all the air of novelty of some book-learnt fact, which every one practically acquainted with the subject knows that the merest tyro, who has ever observed for himself at all, must have met at the very outset of his observations. Of this character in a striking degree is the formal announcement by Dr. Carpenter, that "the observations of Professor Retzius upon the varieties of form which the cranium presents in different races, have indicated this among other facts,—that the *position* of the cerebellum may vary considerably, being much more horizontal in one case, and more vertical in another, so as to correspond with a greater or less posterior protuberance, without any corresponding variation in the size of the organ itself." Now the fact is that it would be impossible to take twenty English skulls from amongst the population at random without seeing this fully exemplified, such is the mixed character of the race; and it is quite as ridiculous and indicative of ignorance to announce this fact so notorious to phrenologists as a novelty, as it would be to give out as a new discovery just made, that there was a connection between emphysema of the lungs and diseased heart, or between disorganized liver and dropsy.

Had Dr. Carpenter been impressed with the *duty* of making himself acquainted with subjects before he undertook to criticize them, he would not have betrayed the disgraceful ignorance of the writings of Gall, and phrenological principles generally, which characterizes his article. He says, "Scarcely any attempt has been made to map out the base of the brain into organs, and no attempt whatever has been made to shew what share is taken by the internal surface of the hemispheres in the psychical operations of man or any other animal; so that we are scarcely beyond the mark in

asserting that nearly (if not quite) *one half* of the cerebral surface is *totally unappropriated*. . . . No external examination of the cranium, such as alone can be made on the living head or the unopened skull, can give any account of the form of the *base* of the hemispheres," &c. What are we to think of such assertions as these, when the fact is, that the convolution, the prominent development of which *first led to the discovery of phrenology*, that of Language,—*is the very last on the base of the anterior lobe—the whole under surface of which is mapped out*. That Dr. C. does not know how to give any account of the form of the base of the hemispheres from an examination of the living head, no one will dispute; but when he asserts the thing cannot be done, he states that which is untrue, and exposes his own ignorance. Unfortunately for Dr. C., there is no part of the surface of the brain on which the development of the convolutions can be more exactly determined by external indication than the base of the anterior lobe. The size, prominence, and position of the eyes—the breadth between them—their position with relation to the superciliary ridges—the breadth, prominence, and *infinitely varied curves* of the latter,—form a criterion for estimating the development of the convolutions seated in the *fosse* on each side of the *crista galli*, and on the floor of the orbit, which we may seek for in vain with respect to other parts of the brain. To be able to read these signs, however, requires *study, personal observation, a practical acquaintance* with the subject,—qualifications, in short, quite the reverse of those which form the critic, the sole requisite for the practice of whose art would appear to be presumption. With regard to the middle and posterior lobes, there are external indications, such as the breadth of the head in the basilar region,—the relative position of the floor of the orbit, meatus auditorius, and occipital spine,—the protrusion or retraction of the cerebellum,—which give a very good indication of their general size, and much more accurate information with regard to the development of particular portions, than persons not conversant with the subject would *à priori* have supposed. Observation has taught me that the prominence of the portion of the skull immediately below Combativeness, always produces a great dread of physical pain, from which I conjecture that the under surface of the brain lying immediately above the cerebellum, is principally devoted to the analysis and memory of the sensations furnished by this organ.

After stating that the anterior lobe is developed in the embryo before the middle and posterior, Dr. C. exclaims, "Strange as this assertion may be to phrenologists, &c."

Now the fact is, that the prior development of the anterior lobe is both noted and commented upon in Gall's writings. Considering that the discoverer of phrenology was the founder of the anatomy of the brain,—FOUNDER, I repeat, is the word to employ, and the one which the unanimous voice of a grateful posterity will one day bestow upon him,—sneers at the anatomical knowledge of phrenologists from a man like Dr. Carpenter, who has *done nothing*, are as ludicrous as inappropriate.

Half styling himself a phrenologist, with an "*if we find reason to adopt the phrenological system as a whole*," Dr. Carpenter manifests a strong and deeply-rooted hostility, without the manliness of an open foe. He carps and cavils, nibbles a little here and a little there, detracts, depreciates, and shews unmistakably the animus which governs his proceedings. He would *like* to condemn the whole system, but haunted with the fear of its truth, he condemns with a reservation, *critically, judiciously*, that is to say, leaving a wide margin, to hop backwards and forwards as expediency may in time to come dictate.

Southampton, Dec. 1846.

T. S. PRIDEAUX.

VIII. *Case of Epileptic and other Fits, Delirium, Neuralgia, Vomiting, and the discharge of Arsenic taken long previously, successfully treated with Mesmerism, which produced intuitive knowledge of the internal state, the future course of the Disease, and the proper treatment.* By J. C. LUXMOORE, Esq., of Alphington, Devon.

I SHALL premise an account of the case before I saw it, by Mr. Parker, surgeon, at Exeter.

"In 1833 I was requested by Dr. ——— to attend Mrs. Bird with him. She was then suffering daily from *epileptic fits*, varying from 6 to 8 hours in duration, and they have continued as long as 48 hours: *frequent delirium*: *paralysis* of the left arm and left leg: the left hand inverted, so that the fingers could not be separated without great exertion: *vomiting* of nearly all her food, and very frequently blood, even as much as half a pint at a time. She had a large painful *tumor* in the left iliac fossa, connected with the uterus, from which tumor the aura epileptica always proceeded. She had also a *cough* resembling hooping-cough of the most violent character.

"The above sufferings had been treated by *one bleeding*, *one cupping*, *leeches*, and *repeated salivations*. She was once under *salivation* for 12 consecutive months. The *materia*

medica had been *ransacked*. *Electricity* and *galvanism* had been also resorted to. But *no beneficial effects* attended any of the treatment.

"I removed the tumor by the application of leeches to the os uteri. It frequently returned, and was as often removed by the same means. The paralysis of nearly *three years duration* was quite cured by the application of moxa, and has remained well to this day, now nearly 14 years. The cough was much relieved by the same means. Tic douloureux was also added to her other ailments.

"All other means having failed to relieve her sufferings, I suggested bleeding her from the arm, which was attended with such relief, that I have now *bled her nearly SIX HUNDRED times*, never taking less than *half a pint*, and more frequently *more than a pint*, each time. The treatment after a while lessened the violence of the fits, shortened the duration of the delirium, stopped the vomiting of blood, but had *no effect on the tic douloureux or the vomiting of food*.

"I ceased to attend Mrs. Bird for some time. In 1834 I was selected as her sole medical attendant, when I found her with her *face, eyelids, lips and tongue much swollen*; scarcely able to speak or swallow; the *inside of her mouth was covered with black pustules*. She had been taking for *some months* moderate doses of the solution of *arsenic*, which Dr. — had prescribed for her tic douloureux, and which is a very ordinary treatment for that complaint. She was at the same time taking *frequent doses of lime water*.

"I have never given her a single dose of arsenic or mercury. She has frequently called my attention to a watery *eruption* on her legs and feet, arms and hands; and on eating salt or salt meat has complained of *garlic eructations*. Mrs. Bird kept her bed *for seven years*, and then gradually gained strength, until she was able to walk short distances; but the tic, fits, and vomiting of food were never subdued.

"The attendance on and subsequent death of her husband, in 1845, again increased all her ailments. The fits became more violent, and the weakness gradually increased; the tic douloureux attacked every part of the system, particularly in the form of *angina pectoris*, which I have frequently witnessed; and expected her death every moment.

"In 1845, I recommended *mesmerism*, but *she would not consent to it* until October of that year. She was now in a deplorable state, violent fits occurring daily, or rather nightly: tic douloureux without intermission. She could take very little solid nourishment, and even that little was nearly all rejected within a few minutes of its having been taken. From all these symptoms I did not consider she would live a month.

Mesmerism was now had recourse to, a detailed account of which is furnished by Mr. Luxmoore in the following pages.

"I. B. PARKER."

On the 24th of October, 1845, I, in company with Mr. Parker, visited Mrs. Bird, whom I had never before seen. In *seven minutes* I succeeded in getting her into *mesmeric sleep*, although she had, on my arrival, assured me *she did not think mesmerism would ever affect her*. I aroused her at the end of half an hour. During sleep the *left hand* contracted in the manner described by Mr. Parker: *blowing upon it caused relaxation*.

Oct. 27th. Asleep in *three minutes*, and was aroused at the expiration of one hour.

Oct. 29th. Mesmerised late in the evening, with the intention of leaving her asleep, (she gets no natural sleep.) She soon fell into *sleep-waking*, mistaking me for a particular friend of her late husband's. *Mesmeric attachment* now manifested itself, so as to oblige me to give up the idea of leaving her asleep. *Community of taste and feeling* were also very marked. Slept two hours.

Nov. 1st. Has suffered much from spasms, rigidity, and palpitation of the heart; all which were much better during sleep-waking, and this continued two hours.

Nov. 3rd. Found *Mrs. Bird in high delirium*, declaring neither Mr. Parker nor I should come near her; and on my approach she attempted to bite and strike me. In *ten minutes* she was in *quiet sleep-waking*.

At the expiration of two hours I aroused her, but, not finding her collected, I *again put her to sleep*; shortly after which she awoke quite comfortable.

Previously to being mesmerised, these fits of delirium never lasted less than *six or eight hours*, and have continued *six weeks*.

Nov. 5th. Feels much better. In mesmeric sleep-waking two hours and a quarter.

Nov. 6th. All day threatened with a fit, conscious of its coming on just as I arrived. Mesmerised, and immediately had the fit, with slight delirium and considerable rigidity: aroused her in a little more than two hours, unconscious of what had taken place. *She hears no voice but her mesmeriser's, nor can she distinguish the loudest mechanical sounds*.

Nov. 8th. General health improved, has suffered *scarcely any pain* from tic since first mesmerised, although up to that very day *she had never been free from it for eleven years*, and has been in the habit of rubbing half an ounce of creosote

into her face and head every fortnight. Slept two hours and a half.

Nov. 10th. Mesmerised two hours and a quarter. Rather poorly.

Nov. 11th. Mesmerised two hours, during which she suffered from a slight fit of rigidity. While Mrs. Bird was in sleep-waking, I *silently placed* the kernel of a nut in *my* mouth; *she* then complained of a "*nasty*" taste, and in one moment began *retching violently*. I ascertained she had lately taken a *dislike to nuts*, from having eaten a very bad one.

Nov. 14th. Mesmerised two hours and a quarter: has had no tic nor fit.

Unavoidable circumstances prevented Mrs. Bird's being again mesmerised until the 22nd; in the interval she had three fits, and was obliged once to use creosote to ease a slight attack of tic.

Nov. 22nd. Slept two hours, during which she had a slight fit. I to-day observed that in sleep-waking she was *much influenced by my will*. She pointed a finger, opened or closed her hand, placed it on my knee or took it off, by my *silently willing* her to do so.

Nov. 24th. The old distressing cough, resembling whooping-cough, has returned, but no fit. Slept three hours.

Nov. 25th. Much more cheerful, and seems better, but had a violent fit during mesmerism, accompanied with extreme rigidity; the head and heels only touching the sofa, the spine being arched backwards. It took me nearly a quarter of an hour to relax the body.

Nov. 29th. Has suffered slightly from tic, cough very bad, voice weak, slept three hours and forty minutes.

Dec. 1st. No tic. During sleep-waking, Mr. Parker burnt moxa on the spine in hope of relieving the cough; she felt the pain for a moment, but it did not produce a fit, as was the case before mesmerism was resorted to. On arousing she was unconscious of having been burnt. *While asleep she said bleeding would do her good.*

Dec. 2nd. Bled before she was mesmerised; then had a *very tranquil sleep*. *No rigidity* even of the left hand. Circumstances prevented Mrs. Bird's being again mesmerised until the 16th; and, although a *very exciting* circumstance took place, she had *but two fits and no tic*.

Dec. 16th. Spirits low; slept three hours; *no fit nor tic*. Mrs. Bird's *cerebral organs are easily excited* by local mesmerism: I however scrupulously avoid touching them, unless actually necessary, as I well know the excitability of her brain.

Dec. 19th. Slept two hours; but did not get into perfect sleep-waking until after a fit and considerable rigidity. When this was over, she said, "*I shall be ill on Christmas-day, and have a very severe fit on the last day of the year; it will be the worst I have ever had; but, if I survive it, I shall be better afterwards.*"

Dec. 20th. Slept two hours and a half; during which she had a severe fit.

Dec. 22nd. Found Mrs. Bird in high delirium, beating herself on the floor. Soon mesmerised her into sleep-waking, and, at the end of one hour and three quarters, I aroused her, quite tranquil; she had been much irritated during the day, which may account for her uncomfortable feelings.

Dec. 24th. Slept two hours and a half, during which Mrs. B. had two fits, but very little delirium; she again alluded to the attack on Christmas-day, and said, the second would be on *New Year's Day, (not on the 31st of December, as she had before stated:)* and added, "*I shall be very ill all day. The worst will commence at 6 p.m., and, if I am alive, at 12 o'clock at night I shall recover.*"

Dec. 25th. *Very delirious, and has been so all the morning.* I mesmerised her, but it took *two hours to overcome the delirium*; at the end of three hours, I aroused her, perfectly tranquil.

Dec. 26th. Much better; slept three hours.

Dec. 27th. In a very confused state of mind: mesmerism soon reduced the delirium, and on arousing she was tranquil and collected.

Dec. 28th. Feels better, slept three hours, and had a severe fit. During sleep-waking she said, "*I must, on the 1st of January, be bled copiously after 6 p.m., and my feet kept warm; give me a little coffee, if possible, after I am bled: it will be no use trying to mesmerise me until after 5 p.m.*"

Dec. 29th. Very tranquil: mesmerised three hours: no fit, nor tic.

Dec. 30th. Has suffered from spasms; mesmerised; no fit, nor tic.

Dec. 31st. Mesmerised four hours; suffered from tic, owing to having been exposed to a current of cold air.

Jan. 1st, 1846. Mr. Parker and I visited Mrs. Bird in the forenoon, and found her very restless and ill. At a little after 5 p.m. we found her *quite delirious*. I commenced mesmerising her, but she did not get into sleep-waking. Soon after 6 o'clock a *very severe epileptic fit came on; her struggles and convulsions were frightful*; she would, in a moment, jump from the reclining position, and stand on her toes in that posture, become rigid, then fall away relaxed, and remain

almost inanimate. Shortly after the commencement of the fit, Mr. Parker opened a vein in her left arm, and, although the orifice was large, scarcely any blood flowed, and what did come was more like treacle than ordinary blood: another vein in the same arm was opened, and the hand placed in hot water, &c., but not more than half a pint of blood could be obtained; the other arm was then tried, with, for some time, no greater success; at last, the blood changed colour and flowed more freely. Still the fits returned, at very short intervals, for nearly six hours. At three different times, Mr. Parker, the nurse, and myself, all thought her dying; and at one moment we feared she had ceased to exist. The disturbance about the head and lungs was frightful. Passes over both afforded relief. I had during the whole of this time continued to mesmerise her, and kept one hand well wetted with cold water on her forehead when her struggles would admit. At 12 o'clock I saw her lips move; she said, "I am better now; I am only a little faint; I shall be better directly." She then took a cup of coffee, remained partially faint for some time, but quite collected. At a little after 1 o'clock I aroused her, and she seemed better than could possibly be expected.

Jan. 2nd. Very sore from the effects of the fit; mesmerised into sleep-waking in two minutes, when she said, "I told you I should be very ill yesterday; you see I was right; *I shall not have another fit until the 9th of June in the evening.* unless I am greatly excited or frightened. I must, if they wish me to get better, be *bled every Thursday for five weeks*; it will weaken me, but I shall regain my appetite, and be able to take solids:" this she had not done for a long time.

Jan. 3rd. Suffering from slight head-ache; mesmerised two hours and a half, during which she took coffee and plain cake; on arousing the head-ache had vanished.

Jan. 4th. A little confused, but not delirious; mesmerised three hours. During her sleep-waking she took coffee and a small quantity of animal food for the first time for many weeks. She said, "I should have been better if they had taken more blood on the first of the month; it would have drawn off more of the black blood from the vessels about the brain. I shall, after my next bleeding, if Mr. (Luxmoore) (it must be remembered that she does not know me in her sleep-waking) puts me to sleep, be able to eat a mutton-chop for supper.

Jan. 5th. Better; had two hours natural sleep during the night, and retained her breakfast. During sleep-waking, which continued two hours and a half, she said, "*The first thing that injured me was being salivated. I ought not to have*

had any mercury. My then medical attendant also gave me a solution of arsenic, which I took until my mouth was all over black spots; it created inflammation in the stomach, which has never subsided.”^s

Jan. 6th. Looking better; mesmerised one hour and three quarters; says, “A cup of coffee should be given me after bleeding; I will tell you more on Friday (Jan. 9.)” No tic for some days.

Jan. 7th. Still better; mesmerised two hours.

Jan. 8th. Not quite so well; was bled as directed; then mesmerised more than two hours, and on arousing felt better.

Jan. 9th. Soon after she got into sleep-waking, she said, “How beautiful! I see all my inside.” She described the structure of her foot, and then went through many other portions of her body with (in the opinion of Mr. Parker, who was present) great accuracy.

Jan. 10th. Mesmerised one hour and a half, and aroused spontaneously; says, “Mesmerism may be omitted on Sunday without injury.

Jan. 12th. Side (uterus) very painful; has a headache of the description which in her case is usually followed by a fit; soothing mesmeric passes relieved her much. Aroused at the end of three hours by my silently willing her to be so. In her sleep to-day she described a sort of coating over the inside of her stomach.

Jan. 13th. Side easy for some hours after I left yesterday, but the pain has since returned. Mesmeric passes again gave relief. After she had been in sleep-waking some time, she, quite contrary to her usual custom, became violent, attempting to strike me: I placed my finger on Benevolence and sub-

^s The effects on the mouth and skin (p. 518) were such as slow poisoning by arsenic sometimes produces. It also causes inflammation of the eyes and stomach. In a Clinical Lecture by Dr. Elliotson, reported in the *Lancet* for May 5, 1832, he detailed the very slow poisoning of a family near Chelsea by arsenic, one having died before he was called in, and nobody could guess why. He immediately suspected arsenic was the cause of the watery eyes, vomiting, and quickness of pulse. On a diligent search, colours containing arsenic and copper were found in large quantities buried in the damp kitchen and garden surrounding the house, left by the previous occupier. As water had free access to the arsenite of copper, an eminent chemist had no doubt that arseniuretted hydrogen had been formed and had vitiated the air of the house. They all recovered by bleeding. After arsenic swallowed has been apparently all removed from the stomach, inflammation may remain in the organ. A case of the kind is recorded by Dr. Roget in the *Transactions of the Med. and Chir. Society* (vol. ii.), where bleeding and other anti-inflammatory means were requisite to the cure, though stimulants also were required. Conformable to all that we observe of the symptoms and to all we know of appropriate ultimate treatment in poisoning by arsenic is the present wonderful narrative. Dr. Elliotson mentions a lady who had spasm, &c., of her stomach and pains of her limbs for years after swallowing arsenic.—*Zoist*.

duced her, but, on my ceasing to act on that organ, her angry feelings returned: I at last discovered that a kerchief she wears over her ears had slipped, and was pressing on Destructiveness; on removing it, all anger ceased. Her left hand was, as usual during the first part of her sleep, contracted, and I proceeded to release it by blowing, passes, &c., when she said, "If you place your fingers just by the side of Veneration, and draw them down the arm and beyond the fingers two or three times, you will get rid of the contraction much better." This proved to be true, but in most cases the contrary would have been the effect.

Jan. 14th. Mesmerised three hours; side again relieved by passes.

Jan. 15th. Bled as directed; mesmerised about two hours; aroused refreshed.

Jan. 16th. Better. In sleep-waking, which lasted two hours and a half, she said, "The black blood on the top of the head is much reduced by last night's bleeding." Appetite tolerable, and she retains most of her food. No tic.

Jan. 17th. Mesmerised three hours and forty minutes; breathing difficult; passes with the flat hand gave ease to the lungs. Breathing over the chest made her start, and gave the sensation of electric sparks. Had two hours natural sleep during the previous night.

Jan. 19th. Has again had two hours natural sleep, and seems better than I have ever seen her; breathing much easier. I breathed over her lungs, then on my own fingers, and passed them (touching the dress) from the top of the shoulder, over the lung, and off by the waist. This produced in her the sensation of electricity, following my fingers, and passing off like sparks as they left her body. Her hand also on the same side became as it were electrified, so that the tips of her fingers touching any part of her body or mine caused the feeling of sparks having been drawn through them.

Jan. 22nd. Has thrown no food from her stomach for ten days. Is suffering from a slight cold, with difficulty of breathing. Bled as directed. Mesmerised, and was better on arousing. Electric phenomena as on Monday (19th.)

Jan. 23rd. General health better, but side painful. Soon after sleep-waking was produced, she made signs that her jaw was locked; upon which I enquired how I could relieve it; she took my hand and made passes from the ear to the mouth, which soon had the desired effect.

Jan. 24th. Side still painful, otherwise better; appetite good, and retains most of her food; mesmerised, and said

the next two bleedings would much lessen the black blood on the brain.

Jan. 26th. Annoying circumstances caused a headache. Mesmerised, and was better on arousing.

Jan. 27th. Mesmerised two hours, side and head still painful; says the tumor in the former will be relieved by a discharge within twenty-four hours.

Jan. 29th. Side has discharged. Bled as directed. Mesmerised two hours, and awoke very comfortable.

Jan. 31st. Better. Mesmerised two hours and a half.

Feb. 2nd. Slight headache. Mesmerised, and said *she would give further directions as to her treatment after bleeding on Thursday. (Feb. 5.)*

Feb. 5th. Has suffered from rheumatism since Monday. Bled, and then put to sleep. I rendered her limbs rigid, and on relaxing them the rheumatic pains had left. *She, as promised, now gave further directions as to her treatment, saying, "I must not be bled again for a month or three weeks at the earliest, unless I have a fit. The coating in my stomach, which I mentioned in January, is rather loosened; my food should be nourishing. If this treatment is followed, I shall be sometimes better and sometimes worse until the 9th of June, when I shall have a bad fit; but, if proper precautions be taken, I shall recover. I shall from time to time give directions as to my treatment. I do not mean to say I shall live until the 9th of June, but, if I do, what I have named will take place: life and death are in the hands of the Almighty."*

Feb. 7th. Rheumatism has not returned, but she again rejects most of her food. Mesmerised three hours.

Feb. 9th. Mesmerised two hours and a quarter. Appetite indifferent.

Feb. 12th. Better, but appetite bad, and she retains but little food, though apparently gaining strength.

Feb. 14th. Was much frightened last night by two drunken men entering her garden and knocking at her door; this produced violent palpitation, and shortly her legs and feet began to swell, assuming a dropsical appearance. Mesmerised.

Feb. 27th. Absence from home has prevented my mesmerising her since the 14th instant. She has suffered slightly from tic, but *nothing like she did before being mesmerised*; legs still swollen. During her sleep-waking to-day she suffered from rigidity and locked jaw, which required some perseverance to overcome. She said, *"I have lost some ground from being so long without mesmerism."* She still vomits her food, and says she shall continue to do so until the coating is removed from the stomach.

Feb. 28th. Mesmerised three hours ; at first she suffered from lock-jaw and rigidity, which were soon overcome. *She directed that small quantities of laudanum should be applied to the stomach externally, and added, "I shall be much weaker yet, and on the 7th of March delirious, and should be mesmerised from 6 to 8 o'clock."* I to-day rendered the ankles and legs rigid several times, and this reduced the swelling.

March 2nd. *Excessive debility.* Mesmerised into sleep-waking ; soon after which she had a most violent spasm about the heart, which seemed to threaten life. After it had ceased, she said, "*I shall have another attack in about ten minutes, and another between 7 and 8 in the evening. The former took place, and at the end of four hours I aroused her, when she was perfectly unconscious of all that she had suffered. At half-past 6 p.m., I found her rather delirious, but soon got her into sleep-waking, when she told me the attack would last on and off for an hour. This proved correct. The spasms were terrific ; her screams might have been heard a long way off. The violence of the attack on the 7th will, she says, commence about 6 o'clock p.m. ; it will be useless for me to persevere in mesmerising her for more than three hours that night. The swelling of the legs has subsided, but the water is gone into her chest. This, I fear, was caused by my driving it from the feet and legs. The dropsical manifestations were, she thinks, produced by the fright on the 14th of February, causing interruption of the circulation of the blood.*"

March 3rd. Rather more comfortable, having had some natural sleep during the night. Mesmerised four hours, and suffered from slight spasms.

March 4th. Much better, but has felt a little tic. Mesmerised three hours, and said, "*I shall throw a quart or three pints of water from my stomach within forty-eight hours, which will relieve the chest. I am in a very weak state, but on the 7th they must not be afraid to follow my directions, which will prove beneficial. I shall be in a high state of delirium from inflammation on the brain, resulting partly from over anxiety and partly from want of free circulation. They should take a small quantity of blood from the temporal artery, but, if this cannot be done, more must be taken from the arm : then rub the chest with laudanum, and apply mustard plasters to it and the feet. If they follow these directions, whatever I take on Saturday night and Sunday will remain on the stomach. On Saturday after bleeding I may have a wine-glass of sherry, given in small quantities at a time ; arrow root will be good for me. I should be mesmerised at 6 p.m., and bled as soon as I am asleep ;"* (she often talks of being put to sleep, but never

admits that she is so when mesmerised.) "*Let me be kept as much under mesmerism as possible for three hours; I should also have a dose of morphine equal to twelve drops of laudanum. I shall then have a better night than for some time. I may have a wine-glass of sherry on Sunday. PAY NO ATTENTION TO ANY DIRECTIONS I GIVE RESPECTING MYSELF ON SATURDAY (March 7.) After Sunday I shall again reject my food.*"

March 6th. Yesterday she vomited nearly two quarts of water, which much relieved the chest. Mesmerised; says, "*The tumor in my side (uterus) will discharge on Thursday or Friday. I shall be very weak, but better on the 14th. The day before, on the same morning I vomit the coating from my stomach, I shall eject a little blood.*"

March 7th. Mr. Parker and I visited her rather before 6 o'clock p.m.; she was in a *high state of delirium*, declaring she would destroy herself. I placed her on the sofa and commenced mesmerising her, but was obliged to *put my finger on Benevolence* before she would allow me to proceed. Until I resorted to this expedient, she attempted to strike and bite me. I could not get her into sleep: still mesmerism had a very soothing effect, and she was sufficiently under its influence to object to the touch of any one but her mesmeriser. Mr. Parker attempted to open the temporal artery, but, owing to its being in her case very deeply seated, he did not succeed; she was therefore bled from the arm. All her other directions, with one exception, that of washing the chest with laudanum, which was *quite unintentionally omitted*, were strictly attended to.

March 8th. Found Mrs. Bird in a sort of quiet delirium, and was informed that, during the night and since she arose, she had been constantly falling asleep and starting up again. She was soon mesmerised into sleep-waking, and the delirium passed off. She said, "*It is a pity they forgot the laudanum, but it is no wonder, they had so many difficulties to contend with. I should have had a better night, but as it is I shall be weaker for it all the week. The morphine would have quieted the internal nerves, and the laudanum the external ones; but, the latter being omitted, I felt sleepy, but was continually disturbed. On the 12th, in the morning, I shall be very faint; I shall throw from my stomach more than a quart of water. There will be no delirium after to-morrow, 3 o'clock, until the 20th, and then it will not be much. On Saturday I will give you further directions.*"

March 9th. Just as yesterday. Mesmerised into sleep-waking, and the delirium ceased. At five minutes after 3 p.m. I aroused her, quite free from delirium; but she

thought it was still Saturday, having lost the time during which, in her waking state, she had been delirious.

March 10th. Quite collected; side painful, breathing oppressed. Mesmerised.

March 11th. Mesmerised two hours and a half; chest more uneasy.

March 12th. Mesmerised four hours; *feels faint and has thrown from her stomach two quarts and half a pint of water.* During sleep-waking, she said, "*I shall have three very severe spasms about the heart in a quarter of an hour.*" They took place. Mrs. Bird also added, "*I shall, on the 3rd of April, have a very severe fit of tic, but I will tell you more about it on Saturday. If, when I throw the coating from my stomach, Mr. Parker will analyze it, he will find it contains arsenic.*"

March 13th. Tumor has discharged, and Mrs. Bird has thrown nearly a pint and a half more water from the stomach. Mesmerised, and said, "*I shall, in ten or fifteen minutes, have three severe spasms about the heart.*" They took place; her screams and convulsions were frightful. Mr. Parker, who was present, said he never saw any more severe. After they were over, she said, "There's an end of the ill effects of my friend's forgetting to put laudanum on my chest."

March 14th. Mesmerised, and seems better. During the sitting, she gave the following directions: "Let me have as much mesmerism as possible next week, any time any day, except on the 20th, when it should be in the evening. *I shall wander slightly on that day; Saturday be exhausted; Sunday poorly, but better; Monday still better; Tuesday a severe head-ache. The tic, on the 3rd of April, will commence at 10 o'clock a.m., and end at 3 p.m.; from 2 to 3 it will be at the worst. After the tic, six violent spasms; when they are over, let two teaspoonfuls of laudanum be rubbed on the chest and stomach.*"

March 16th and 17th. More comfortable; mesmerised both days.

March 20th. Breathing bad. Mesmerised, and said, "The water is again collected on my chest. I must, as much as possible, avoid the recumbent position, even at night, and have some medicine to promote the swelling of my feet. I was to have been better to-morrow, Sunday and Monday, and so I shall, except the *breathing, which will be worse on these days.*"

March 21st. *Breathing still bad.* Mesmerised, and said, "The water in my chest is increased; the medicine and liniment have been of use; without them, the increase would have been greater. Passes down the back and chest will be beneficial." I followed her directions.

March 23rd. *Breathing very bad.* Soon after she was under the influence of mesmerism, very distressing attacks of difficult breathing commenced, threatening suffocation. In the first and second she suffered very much, starting on her feet; in that state became quite rigid; and in a minute or two relaxed, and was left perfectly powerless. She then said, "You must keep me leaning forward, or I shall die; *you must use any force to do it. I shall have six more attacks; do not fear, and I shall be safe.*" The six paroxysms took place, and I had to use great pressure to prevent her rising. After this, she said, "*I shall throw water from my stomach about 5 o'clock to-morrow morning, and more before noon. Mesmerism will not take full effect on me, on the 3rd of April, until 3 o'clock.*"

March 23rd. *Threw about two quarts of water from her stomach about 5 o'clock in the morning, and rather more than a pint at 10.* Mesmerised into sleep-waking, and said, "*I shall throw more water from my stomach before 5 o'clock this evening.*"

March 24th. *A pint more water was ejected after I left yesterday.* Feels weak, but two hours and a half mesmerising much refreshed her.

March 25th. Rather better, but suffers from not being able to lie down; feet swollen. Mesmerised four hours.

March 26th and 27th. Looks better, but is still weak. Mesmerised both days.

March 28th. Mesmerised two hours and a half; has a *watery rash*, which in her sleep-waking she says is on the inside of her stomach, as well as on the external parts of the body.

March 29th. Mesmerised one hour and three quarters. No water in the chest; feet less swollen.

March 30th. Rash still bad. Mesmerised, and said, "My stomach is very much irritated, and the arsenic acting on the system is poisoning the blood, and also the water that is floating about me; this makes the rash so troublesome."

March 31st. Rash still troublesome; chest and stomach painful. Mesmerised two hours.

April 1st. Mesmerised. Rash has partially disappeared, owing to a slight chill: says "it will appear again before the 3rd; it is now looking very angry in the stomach."

April 2nd. Rash a little more out; slight tic. Mesmerised.

April 3rd. *Tic came on this morning, in exact accordance with Mrs. Bird's prediction.* No tongue can describe what she appeared to suffer. *At 3 o'clock p.m. the tic ceased, and I got her into sleep-waking. Previously to this, although I had been with her a long time, all my endeavours to produce*

sleep were unavailing. At a quarter after 3 the spasms commenced; the six occupied twenty-five minutes, and were very violent. After they were over, she said, "*I shall get on tolerably until the 16th of this month, when I shall have either seven or eight spasms about the head and heart; they will last nearly an hour. On the 16th I should be under mesmerism from 12 to 2 o'clock. After this I shall have a severe headache for three days; if it lasts to the fourth, I must have aperient medicine; and if to the fifth, should be bled.*" On arousing she was quite free from tic, but her head and face were sore from the effects of it.

April 4th. Free from tic, which much surprised her, and quite unconscious of having suffered from spasms. Mesmerised two hours.

April 5th. Mesmerised one hour and three quarters, and said, "There is a little water in my chest, the weather is much against me," (rain has fallen and there is great dampness in the air). "*On the 16th, the fifth spasm will be the worst. I fear Mr. Luxmoore will require assistance to hold me, but no one but himself must touch my forehead or over my heart; it would be dangerous.*" Chest mesmerically electrified.

April 6th. Mesmerised. Says, "The water in my chest is not much increased." I made, by her direction, passes with the flat hand from chest to feet: this produced slight swelling of the feet. Her chest was again mesmerically electrified, and she observed yellow fire follow the tips of my fingers. The electricity of yesterday, she says, prevented the breathing being as bad as it otherwise would have been.

April 7th. Breathing bad. Mesmerised, and said *the water in the chest will be thrown off on Saturday (April 11), at 5 o'clock.* Chest again electrified, and she saw ribbons of fire pass through the water, which they seemed to warm.

April 8th. Breathing still bad; was frightened again last night by two men entering her garden. Passes with the flat hand made her feet swell.

April 9th. Breathing bad. Mesmerised three hours and a half; says, "Whenever the coating is removed from the stomach, I must have a strong dose of aperient medicine, to prevent any portion remaining in the bowels."

April 10th. Mesmerised one hour and three quarters; feels better, except the breathing.

April 11th. *Threw off five pints of water this morning.* Mesmerised, and said, "*I shall throw off a little more water at 5 o'clock to-morrow.*"

April 12th. More water having been ejected, the breathing is much better. Mesmerised one hour and forty minutes.

April 13th. Breathing still better. Mesmerised, and said, "*I fear I must be bled on the 21st, as the head-ache will not pass off without it.*"

April 14th and 15th. Slight spasms while asleep, otherwise comfortable. Mesmerised both days.

April 16th. Mr. Parker and I visited Mrs. Bird at ten minutes before 12 o'clock; we found her on the floor quite delirious. In less than two minutes I mesmerised her into sleep-waking, and she became *sane and tractable*. The *spasms shortly commenced*, and increased in violence to the *fifth, which was truly frightful*; and during which, she, notwithstanding *all my efforts, assisted by Mr. Parker*, threw herself on the floor, carrying me with her, and pulling out her hair by handfuls; the next *two* spasms were not so bad, and the last was very slight. Soon after the spasms had ceased, she said, "Between this and the 21st, mesmerism must, on no account, be omitted for twenty-four hours together, and, on that day, I should be twice under its influence. *I shall have bad spasms on the 1st of June.* Soon after arousing, a severe head-ache came on, *as she had said would be the case.*

April 17th. Head-ache continues. Mesmerised four hours; says she shall have spasms daily, more or less, until the 9th of June.

April 18th. *Head still aches.* Mesmerised two hours; says there is water in the chest.

April 19th. *Head-ache* and slight spasms. Mesmerised, and then said, "*I shall have rather a severe spasm while under mesmerism this evening; (she was correct).* They must not attend to any directions I may give on the 21st, however plausible they may appear to be. I should be bled on that day at 12 o'clock, and not aroused from mesmerism until after half-past 2. Persons subject to insanity should always be mesmerised by the *same operator*. If I were mesmerised *by any one* but Mr. Luxmoore, I should be insane until the 9th of June. I shall be *ill on the 2nd of May*, and should be mesmerised in the evening."

April 20th. Took a strong dose of medicine as directed. Mesmerised, and said the medicine has had the desired effect, in removing an obstruction.

April 21st. At 11 a.m., I found Mrs. Bird *delirious*; she had been rather *violent*. At half-past 11, I commenced mesmerising her; in two minutes she was in sleep-waking, and the delirium had almost ceased; she might wander for a sentence or two, but soon detected herself. At twenty-five minutes after 12 she was *bled*, and at the end of four hours she aroused perfectly collected, and *free from head-ache*. In the

evening I again sent her to sleep for two hours, when she said, "*I shall throw water from my stomach on Saturday.*"

April 22nd. Mesmerised, and said, "*On the 1st of May I shall throw a little blood from my stomach; on the 2nd, I shall be very ill, particularly towards evening; on the 3rd, I shall throw up something gritty, it will contain part of the coating of the stomach I have before spoken of. Immediately after I have thrown up the gritty substance, I must have a dose of the same sort of medicine I had on the 20th of the month. I shall throw off three pints of water on Saturday next (25th), at five minutes before 6 in the morning. After the 3rd of May, I hope I shall be able to recline.*" *She has not been able to lie down night nor day since the 20th of March.*

April 23rd. Mesmerised two hours and a half; had one bad spasm.

April 24th. Suffering from great nausea, and is very weak. Mesmerised, had a bad spasm, and the nausea produced retching. She said, "*The coating is almost all fallen from the stomach, but still it will not be got rid of until the 3rd of May. If I am under mesmerism to-morrow between 3 and 4 in the afternoon, I shall be able to give better directions about the 9th of June than at any other time.*

April 25th. *Water vomited this morning, and she feels very languid. Mesmerised in the morning, and again in the afternoon, when she gave the following directions for the 1st and 9th of June. "On the 1st of June the spasms will commence at 3 p.m., and be over by 4; mustard should be applied to the extremities for twenty or thirty minutes. To be mesmerised at 2, and aroused at 5 o'clock. On the 9th, at 10 in the morning, I shall be delirious; but there will be no danger of my injuring myself until 10 p.m. No cold water must be applied to the head on account of tic. After 10 at night, violent spasms of the head and heart, which will continue until 12 o'clock. Head and heart to be held by Mr. Luxmoore. From 12 to 2 violent tic; during which let me have hot cloths to my face. From 2 to 4, a fit in great violence; I should be bled as soon after 3 as the struggles will allow. If possible, open both temporal arteries; if not, bleed from both arms. If one temporal artery is opened, and not the other, bleed from the opposite arm. I must be bled until I yawn, and have coffee soon after; then two teaspoonfuls of laudanum to be applied round the temples, face, and chest. From 4 to 6, spasms, and the effects of previous suffering; during which, mustard plasters must be had recourse to, and kept up for twenty-five minutes; I shall then get into a sort of half-stupor until 9 o'clock.*

After this, mesmerism will be deeper than it ever has been in my case. I shall know Mr. Luxmoore, and also shall be asleep; (she does not now consider herself asleep when mesmerised). I must not be allowed to put my foot to the ground this day, nor the next. I may be aroused at 10 o'clock, but should be under mesmerism again in two hours."

April 26th. Has unfortunately given her head a blow, which caused a head-ache. Mesmerised three hours and a quarter.

April 27th. Tolerable in the morning, but during the day circumstances occurred causing a misunderstanding betwixt Mrs. Bird and the person for whom she, in her sleep-waking, mistakes me; this caused her very great distress of mind; and as soon as I mesmerised her into sleep-waking, she became very uncomfortable at having the person she mistook me for with her. I took a great deal of trouble to quiet her, but all to no purpose; so I thought it best to arouse her, and in her waking state assured her that if she thought any one was near, or would approach her, except Mr. Parker and myself, it must be a delusion, and I begged her to keep this idea strongly impressed on her mind while passing into mesmerism. I had however to arouse her several times before I could succeed in making her know me in her sleep-waking; when however this was accomplished, she became reconciled, and said she must be bled immediately, or she should be insane for life, which would not, in that case, last more than a fortnight. She was bled, and then felt better.

April 28th. Very ill and depressed; but during sleep-waking she said, "With due care you will yet save me." Mesmerised twice, and knows me in her sleep-waking.

April 29th. Mesmerised in the morning, when she said, "If you wish to save me, you must be with me from half-past 8 to half-past 9 this evening; it will be a *struggle between life and death*." I sent her to sleep at 7 p.m.; soon after which a spasm came on, and she was *very ill*. I kept her asleep until 10 o'clock.

April 30th. Mesmerised in the evening, and was very comfortable during the first part of the sitting, but ultimately became faint, owing (as she said) to the contents of the stomach beginning to ferment. She also directed hot jars to be placed at her feet, and sal volatile, *two parts water and one part spirit*, to be taken at 12 o'clock to-night, 5 to-morrow morning, 12 at noon, and 5 in the afternoon; and a hot jar to be placed at her side.

May 1st. Mesmerised three hours; said, "I shall be *ill this evening*; keep me asleep as late as you conveniently can to-morrow evening." Mesmerised again *in the evening*;

she was delirious, and remained so for an hour; then became collected, and directed sal volatile, of the same strength as before, between 5 and 6 o'clock to-morrow morning. She now suffered horribly in the calves of her legs and stomach; the pain could scarcely be endured. She has vomited a little blood. On eating salt or salt meat she experiences garlic eructations. All this, and the rash she has suffered from, are, I understand, indications of the presence of arsenic.

May 2nd. Rather wandering. Mesmerised, soon became collected, and said, "My blood is fermenting, as if I were in a state of salivation. The reason I have been obliged to be so often bled, is owing to the medicine I formerly took." Mesmerised again in the evening, and Mrs. Bird's sufferings in the legs, head, stomach, back, chest and arms, were perfectly dreadful; three times did she fall into such a paroxysm, as Mr. Parker, who was present, said he never saw a person recover from; her gasping for breath cannot be described. After a time she became easy, and on arousing was unconscious of anything extraordinary having taken place.

May 3rd. Mr. Parker and I called on Mrs. Bird between 1 and 2 o'clock p.m., and found she had thrown from her stomach a quantity of a gritty substance, in a little bloody water, at 5 a.m.; on applying the established tests, the presence of arsenic was indicated. She had taken the aperient medicine as directed. Mesmerised in the evening for two hours, and, with the exception of great weakness, was much more comfortable. She said, "I must not be allowed to fall into what I call sleep, during mesmerism for some time, (this is a drowsy stupor, quite distinct from mesmeric sleep, both body and mind are in a state of listless inactivity,) or I shall awake an idiot."

May 4th. Much easier; continues to take sal volatile of the same strength; says the system is so paralyzed, that if it were weaker it would have no effect. Mesmerised two hours. In the evening I found Mrs. Bird delirious, but soon got her into sane sleep-waking; when she said, "It is lucky you came to-night, or I should have been raving mad by the morning. I did not tell you of it, as I could not endure the notion of encroaching so much on your time; but I see I was wrong, and will never again withhold any directions I consider beneficial. To-morrow you should be with me from 8 to 9 in the evening. I shall have three severe spasms between 12 to 1 o'clock to-morrow; if I were mesmerised, it would be better."

May 5th. Mesmerised two hours; had the three spasms. In the evening found Mrs. Bird delirious; mesmerised from

half-past 6 to 10 o'clock p.m.; soon got her into sleep-waking. She said, "I could not have lived, if Mr. Parker had not bled me so often."

May 6th. Quite collected; mesmerised twice.

May 7th. Great tendency to the stupor; mesmerised two hours and twenty minutes in the morning, and again in the evening.

May 8th. Very weak. Mesmerised two hours and a quarter, and said, "*Very shortly after I am mesmerised this evening I shall cough, and shall wipe some more of the gritty substance from my mouth. I shall have a spasm between 7 and 8 o'clock this evening, and should have one ounce of Epsom salts with a little peppermint between 4 and 5 to-morrow morning. I shall have spasms all Monday.*" In the evening I again visited Mrs. Bird, and, after having talked to her a little time, sent her into sleep-waking, when she soon coughed, and I wiped from her mouth a gritty substance, precisely similar to that she had vomited on the 3rd; this did not go out of my sight until I delivered it to Mr. Parker, who, on testing, found it contained arsenic. Had a very bad spasm between 7 and 8 o'clock.

May 9th. Tolerably comfortable, but weak, and had a little impediment in speaking. Mesmerised twice; said, "I shall be *very ill Monday and Tuesday* (11th and 12th), and have spasms between 7 and 8 p.m. on the latter day. I shall be *very faint.*"

May 10th. Mesmerised, and said, "I should be mesmerised to-morrow from 10 to 12, 3 to 4, and 7 to 8 o'clock. On Tuesday, from 10 to 12, and 6 to half-past 8. When I faint, rub camphorated spirits into the upper part of each side of my windpipe,—it will recover me sooner than anything else: this will be found beneficial in all cases of fainting. I shall be *very ill on the 3rd of July, but it will not be a fit.* If not mesmerised, I shall not recover."

May 11th. In the morning was tolerable, except the tendency to faint, which however was overcome by strictly following her directions. Mesmerised two hours. In the afternoon I found Mrs. Bird much depressed; a distressing message had been delivered to her. Mesmerised, and for a time she was just as she had predicted; but afterwards became raving mad. I sent for Mr. Parker, who applied mustard to the ankles; but with this assistance, and all the mesmeric means I could think of, it took two or three hours to get her tolerably calm; when she exclaimed, "You have overcome me again; if you wish to save my life, bleed me; do not be afraid." This was done, and before 11 o'clock we left her

perfectly sane. She also said during sleep-waking, "I may lie down to-night." This she *has not been able to do, night nor day, since the 20th of March.*

May 12th. Better than could be expected. Mesmerised in the morning three hours and a half; said, "The *spasm* will, owing to my being bled last evening, come on between 3 and 4, instead of between 7 and 8 o'clock, as I before stated, but it will not be so severe. *I shall wander on the 15th, between 3 and 5 o'clock.* Mesmerised again in the afternoon for two hours; at a quarter after 3 o'clock the *spasm came on*; after which she said, "I must be bled again on the 18th. I shall, *from 4 to 9 in the evening, be as raving as I was yesterday*: I should be bled at a quarter after 8. I shall then be tolerable until the 23rd; after which, I shall be able to give no directions about anything until the 9th of June. On the 21st, I will give you all the necessary directions until the 9th. *Between the 1st and the 9th of June my speech will be very bad.*"

May 13th. Feels better. Mesmerised twice, two hours each time.

May 14th. Tolerably comfortable. Mesmerised two hours in the morning, and the same time in the evening; said, "To-morrow I shall wander slightly, and should be under mesmerism from half-past 11 to half-past 12 o'clock, and again in the evening."

May 15th. Mesmerised, and said, "I threw off two mouthfuls of blood from the lungs this morning; the right lung is very bad, not only shrivelled, but in spots much inflamed. *I shall have a struggle to-night, soon after I am mesmerised. (This proved correct.)* If I were not mesmerised it would take place at 1 in the morning, and then I should be violent. To-morrow I must be mesmerised from 10 to 1, and again in the evening. I shall have a *spasm about 7 p.m.*" Slept three hours in the morning, and two in the evening. *Wandered slightly during the day.*

May 16th. Has a slight cold. Mesmerised, and said, "I am rather out of order from the cold; my right lung is still inflamed, and will be more so. Mesmerised persons are electrified in a high degree; they should never sleep on iron bedsteads, or spring mattresses." Mesmerised again in the evening, and the *spasm was violent about 7 o'clock.*

May 18th. Found Mrs. Bird tolerably free from delirium, but was told she *had wandered a little before I arrived.* Mesmerised two hours and a half. At ten minutes before 4 p.m. Mr. Parker and I found Mrs. Bird delirious. Mesmerised, and retched violently, but soon became collected, and said a

mustard emetic would relieve her stomach. It was administered, but a second was resorted to before the desired effect was sufficiently produced. She now discovered that there was a small portion of *the gritty substance* still remaining in her stomach, which *would be thrown off within three days*. She after some time (as she had predicted) *became raving mad*; screaming, singing, and laughing most violently. I still had great influence over her, although I cannot say she was asleep. She was bled, as she had directed, and soon after became collected, and remained so on arousing. If during the extreme raving I took off my attention for a single moment, she was sure to commit some act of violence, either towards me or herself; but while I kept my will strongly upon her, she was quite tractable, that is, I could prevent violence.

May 19th. Has enjoyed some natural sleep during the night, and is quite free from delirium. Mesmerised twice, and said, "*I have a great deal of water in the chest; I shall throw it off before the 25th, but to-morrow I will tell you the exact day. I shall be better to-morrow than on any day until after the 9th of June, but my intellect will be clearest on the 21st.*"

May 20th. Mesmerised twice, and after she had been asleep some little time, she coughed and *threw from her stomach a small quantity of the gritty substance*, similar to what had been before ejected; this also contained arsenic. During sleep she said, "The *sal volatile* must not be, for a few hours, more than half as strong as I have been taking it, (up to this time it has been two parts water and one part spirit,) as the stomach is lacerated at the parts from which the gritty substance has last been removed. I shall have rather a *severe spasm about noon to-morrow*; when it is over, give me a cup of coffee. I shall *throw about three pints of water from my stomach between 2 and 3 o'clock to-morrow morning*; after which I may lie down, but before that I must keep my head and chest up."

May 21st. *Water has been vomited*. Spirits not so good. Mesmerised, and repeated her directions for the 9th of June, in no particular varying from what she had before said. She now desired that a poultice (made according to a prescription she gave) should be applied to the side to-night and to-morrow night, and *the tumor would then discharge at 1 o'clock on the morning of the 23rd*. "*I shall (she said) feel ill to-morrow, and have a spasm at 7 o'clock p.m.*; it will be over by 8. I should be mesmerised twice. On the 23rd, I should have a dose of salts; on the 24th, I should be mesmerised in the evening, and not awake until 10 o'clock p.m. *On the 25th, I shall have spasms and*

cramp through the limbs and whole system, both in and out of mesmerism: 26th and 27th, ditto: 28th, *severe spasms*; between 11 and 12 o'clock in the day *I shall be delirious, but if it comes to madness*, bleed me sparingly. I should be mesmerised at 10 a.m. 29th, 30th and 31st, spasms, but not very severe; times of mesmerism immaterial. To this date let me go out as often as the weather will permit, except on the 28th; but after the 31st, I should not go out until after the 9th of June. For directions for the 1st of June, see April 25th; 2nd, 3rd, 4th and 5th, spasms; 6th, 7th, 8th, very ill."

May 22nd. Last night the poultice was applied to the side, which caused great pain. Mesmerised twice. Spasm as predicted.

May 23rd. Application to side repeated last night, and *tumor has discharged*. Mesmerised two hours in the morning, after which she was taken into the open air. When I visited Mrs. Bird in the afternoon she was much fatigued; this caused delirium, which it took some time to overcome, but after arousing she was perfectly collected.

May 24th. Took the salts yesterday as directed. Mesmerised twice. I aroused her at a quarter after 10, tolerably comfortable.

May 25th. Suffering from *cramp and spasms*. Mesmerised four hours and a half in the morning, and had a long sleep in the evening.

May 26th and 27th. *Just as yesterday*. Mesmerised twice on each of these days. Internal vision, prevision, and clairvoyance *have all left her*; she does not now during mesmerism recollect a word she has said during lucid sleep-waking, nor has she since the 21st instant.

May 28th. Found Mrs. Bird in her garden *quite delirious*. I induced her to go into the house, and soon mesmerised her into sleep-waking, in which for a time she was collected, but from half-past 10 to 11 o'clock she gradually got worse, *spasms began*, and then she became *perfectly mad*. Mr. Parker bled her, I having placed her as erect as possible in order that faintness might be felt with the loss of little blood, and consequently half a pint was sufficient to produce the effect. On recovering she was quite collected. I kept her asleep nearly six hours at the first sitting, and two hours more in the evening.

May 29th, 30th and 31st. Weak, but quite collected. Mesmerised twice each day, and I had great difficulty in preventing the stupor: *slight spasms*.

June 1st. Mesmerised a little before 2 o'clock; at a quarter before 3 she became restless; this feeling increased to 3 o'clock, when the *spasm commenced with great violence*; nothing but her prevision, and what we had before witnessed

in her case, gave Mr. Parker or myself any hope of her recovery. At a quarter after 3 o'clock the mustard was applied, and *before 4 she was quite tranquil*. At 5 I aroused her, and again mesmerised her for two hours in the evening.

June 2nd. Very languid. Mesmerised, and soon after became delirious for three quarters of an hour, but it appeared to proceed more from weakness than anything else, and might have been increased by the excessive heat of the weather; kept her asleep four hours, and mesmerised her again for two hours in the evening; suffered *slightly* from tic and *spasms*.

June 3rd and 4th. Slight *spasms* and a very little tic. Mesmerised twice each day.

June 5th. *Spasms* rather more severe. Mesmerised twice; great tendency to stupor.

June 6th. Feels *ill*. Mesmerised at a quarter before 10 o'clock, when a severe spasm came on, causing delirium, rigidity, and an involuntary action of the muscles. Slept three hours and a half; was again mesmerised two hours in the evening, and said, "I think a dose of salts would do me good, but I do not *know*."

June 7th. Took the salts, and feels they have been beneficial. Mesmerised five hours, before and during which she had several spasms, producing rigidity and violent involuntary action of the muscles. Was much refreshed on awaking.

June 8th. Very *ill*, and slightly delirious. Soon after I had mesmerised her into sleep-waking a spasm came on; she was quite insensible and unmanageable. Having read Dr. Gregory's translation of Reichenbach's *Researches on Magnetism*, it occurred to me that placing Mrs. Bird's head to the north could do her no harm, and *might* be of benefit. I therefore, without assigning any reason, requested the sofa might be so turned as to bring her, as near as I could judge, into the desired position; and in less than two minutes a surprising change took place. She exclaimed, "My head is towards the north. I feel much more comfortable. I am suffering great pain, but my spirits are better. How bright things appear to me! How dull I have been! but now I see clearly. How stupid not to know that I was to be so very ill to-day, and have so much to go through to-morrow. You have done very well for me. *I shall remain lucid until after a spasm, which will take place about 7 this evening, when all will again be dark until the 10th.*" She also said, "If you were now to turn my head to the west, I should be mad. I think (she added) if all persons subject to insanity were (provided they *do not lie on iron*) to sleep with their heads to the

north, it would be better. East to west, or south to north, is not so bad as west to east." I am convinced Mrs. Bird had never seen Reichenbach's book, but these assertions are, I consider, borne out by his experiments. "I am (she also said) influenced as the compass, being full of a mesmeric electricity; it is similar to electricity and magnetism, but not identical with them. Some persons under mesmerism are not so much influenced by this electricity as others."

June 9th. Although Mrs. Bird was not to be mesmerised until 10 o'clock p.m., Mr. Parker and I visited her in the morning; she was *delirious* and continued so through the day. About half-past 9 p.m., we again saw Mrs. Bird, and at a little before 10 I commenced mesmerising her: *a very bad spasm* came on, acting on her head and heart; then violent delirium with *continual spasms, lasting until 12 o'clock*.

June 10th. *At 12 o'clock the tic commenced*; her agonies were most distressing to witness; she threw herself about, sometimes on the floor, and was quite insane; singing, laughing, screaming, and groaning alternately. At 2 o'clock the tic had passed off, and the fit commenced with great violence: her spine was arched forwards, and she injured it, as she had some time previously predicted. *At 3 o'clock a.m.*, on Mr. Parker's attempting to open her temporal arteries, she became *very violent*, and for twenty minutes resisted all our efforts. We at last succeeded in opening the right artery, but it caused for an instant great agony, as it implicated the nerves, which were suffering from the effects of tic. After a very little blood had flowed, she became sane, and requested to be bled in the opposite arm, instead of the other artery, as the nerves were in such an irritable condition; this was done: the artery and vein were kept open until yawning was produced. *At 4 a.m.*, the laudanum was applied, slight *spasms* came on at intervals, and she suffered much from the effects of what she had gone through. At half-past 5 mustard cataplasms were applied, and as soon as they were taken off, she fell into a sort of *half stupor*; this continued until 9 o'clock, when she got into a *high state* of mesmerism, *knowing she was asleep, &c.*; and said, "I have injured the spine in two places: my side will never gather again, unless there is some active cause; but this would not have been the case, if leeches had been applied, instead of the poultice." Mrs. Bird's predictions in all cases have been fully verified, and we considered ourselves called upon to carry out all her directions. At a little after 10 I aroused her. Mesmerised again at noon, and slept three hours. Internal vision and prevision have returned in full splendour (see April 25 and June 10).

At half-past 7 p.m., I again sent her to sleep for two hours and a half, when she said, "I must be bled every Wednesday for six weeks; the first five times in the arm, and the last in the left temporal artery. To-morrow I should be mesmerised from 11 to 2, and 7 to 9 o'clock." *The cough has come on, and will, she says, last six weeks.* Mrs. Bird, between the 14th of February and 9th of June, had two fits; but it must be recollected, she was twice FRIGHTENED, AND OFTEN MUCH EXCITED. I have neglected to note the dates.

June 11th. Better. Mesmerised three hours and a half in the morning and two hours and a half in the evening, during which she said, "*I shall be very unwell on the 3rd of July*; I should to-morrow be mesmerised twice, but the time is not important.

June 12th. Mesmerised three hours, and prescribed medicine for Saturday.

June 13th. Very tolerable. Mesmerised twice. In the afternoon, and after she had got into sleep-waking, a gentleman of Exeter came to see Mrs. Bird. I then called her attention to his knee, which had been seriously injured some months before from the kick of a horse. After a time, she said, "Your knee is bandaged too tight," (this no one in the room knew but the gentleman himself, who instantly admitted the truth of what she stated.) He was sitting from three to six feet from Mrs. Bird, and wore loose trousers. She was now silent for a little time, appeared puzzled, and requested me to take the gentleman's hand; on my doing which, she started, exclaiming, "*He has steel about him.*" She for a few moments felt uncomfortable. When Mrs. Bird recovered, she said, "Steel is not good for the knee, whalebone or ivory should be used instead, and no metal except silver or gold be introduced." She recommended bathing, local mesmerism, and a liniment, adding, "if the gentleman follows my advice, he will be much better than he is at present."

June 14th. Feels sick from the medicine. *Mesmerised water settled her stomach, and threw her into a very deep sleep, in which she did not hear even my voice, nor could I get her to pay the least attention to me in any way.* On again arousing (if I may use such a term) into sleep-waking, she was *much refreshed*, and directed that she should be mesmerised on the 16th before 12 o'clock in the day, and between 7 and 9 in the evening. Slept three hours and a half.

June 15th. Better. Mesmerised and slept comfortably.

June 16th. Still improving in general health, but the cough, which exactly resembles *hooping-cough*, is very trouble-

some. *Mesmerised water* again produced what she calls the *double sleep*. In the afternoon she had a slight attack of diarrhœa, for which she gave a prescription in case it continued. Mesmerised twice.

June 17th. Head and face swollen; mesmerised twice. In the evening all the symptoms had increased. Bled as she had directed. She also said, "My face should be bathed with an infusion of parsley, marsh mallow, and feverfew."

June 18th. Diarrhœa rather violent. Mesmerised twice, and said, "It will be necessary to use the prescription I gave the other day, and to have my face bathed." All this was attended to.

June 19th. Mesmerised at Mr. Parker's, when a few gentlemen and ladies were admitted to see Mrs. Bird; she aroused at the end of five hours. Mesmerised for two hours in the afternoon, and aroused, feeling better. Face to be again bathed.

June 20th. Mesmerised twice; cough very bad, producing a tendency to lock-jaw, which she said would be avoided either in or out of mesmerism by pressure of the fingers just at the hinge of the jaw. Passes down the spine relieve the cough.

June 21st. Health improving. Mesmerised from a quarter before 3 to 6 o'clock. For twenty minutes she was in the deep sleep, and, on again getting into sleep-waking, she said, "I have been examining my brain to see in what state it will be after the last bleeding on the 22nd of July (Wednesday). *I shall be very ill on the Monday and Tuesday from cramp and violent cough. Before 8 o'clock on Wednesday evening I shall be quite mad*; then bleed me in the temporal artery; this will get rid of the madness, and I shall get into mesmeric sleep: I shall be partially under its influence before, but not asleep. From this time I shall get better, but should not exert myself too much, nor get over-heated."

June 22nd. Somewhat depressed, particularly after 12 o'clock, (there was much thunder in the air.) Mesmerised twice, and says her liver is out of order, and she should eat water-cress, lettuce, and very young onions. Cough still bad.

June 23rd. A severe thunder storm took place last evening, during which Mrs. Bird felt a very curious sensation in the head, spine, and limbs, such as she had never before experienced; there seemed to be slight electric shocks passing through the system. Mesmerised twice, and slept five hours.

June 24th. Mesmerised morning and evening; during the latter sitting Mr. Parker attempted to bleed; the first trial was unsuccessful. There is now some difficulty in getting at

the vein, as she has been *bled* MORE THAN FOUR HUNDRED times in the arm that was now tried. On the second attempt, Mr. Parker's finger unfortunately touched her arm, which immediately became rigid, and, although the vein was opened, scarcely any blood would flow.^t I soon relaxed the arm, and placed her hand in hot water, but all to no effect. She then said it would be safer after a short time to arouse her and open a vein in the waking state, as, if a similar accident occurred to the other arm, we should not be able to bleed her for the night. This was done, and sixteen ounces of blood taken; after which she was again mesmerised for two hours.

June 25th and 26th. Mesmerised twice each day, and is better.

June 27th. The thunder weather still causes uneasiness. Mesmerised twice, and said, "*On Monday, the 29th instant, I will give directions for the following day, and decide whether it will be better to postpone the bleeding from Wednesday, the 1st of July, to Friday, the 3rd, as it would be of great benefit to me on that day, when I shall be so ill.*"

June 28th. Felt better for a drive she took last evening. Mesmerised three hours and fifty minutes; said, "I have not quite got over the effects of the stagnation of the blood on Wednesday. There is great inflammation all up the spine, but particularly at the lower bone."

June 29th. Feels as yesterday. Mesmerised two hours and three quarters in the morning, and said, "The bleeding can be put off until Friday (July 3), if you will mesmerise me every evening after to-morrow from 7 to a quarter before 10 o'clock. *On Friday I shall have spasms through the day; indeed they will commence the night before, but the worst will be between 7 and 8 p.m.; after 8, bleed.* In the forepart of the day let me have as much mesmerism as you can. *I shall be rather delirious.* During the following week I shall be weak and poorly until the last bleeding; a few days after which I shall be able to do without mesmerism for a short time.

June 30th. Had enjoyed many hours natural sleep during the night and feels better. Mesmerised twice.

July 1st. Slight spasms. Mesmerised as yesterday.

July 2nd. Spasms increased, but it must be remembered she was to have been bled last night: the operation by her directions was postponed to to-morrow. Mesmerised twice.

July 3rd. Spasms rather worse. Mesmerised 3 hours in the morning. At 5 o'clock in the evening I again mesmerised

^t When Mr. Parker has bled Mrs. Bird in the mesmeric state, he has always avoided touching her, having used my hand as a rest.

Mrs. Bird, spasms still continued, and *between 7 and 8 three very severe ones came on*. As soon as she became collected after the third spasm I aroused her, and Mr. Parker opened a vein in her arm: it was not done during sleep for fear of a repetition of what took place when she was last bled. When the arm was secured I again sent her to sleep until 10 o'clock, when she was aroused free from delirium.

July 4th. Suffering from reaction after the blood letting. Mesmerised 3 hours both morning and evening. Spine also locally mesmerised with the *flat hand* during both sittings; this has been done daily for some time, and it generally throws her into *deep sleep*.

July 5th. Mesmerised more than three hours. To-day she could bear the spine and chest to be mesmerically electrified by the tips of my fingers and then soothed down with the flat hand.

July 6th. Mesmerised three hours and three quarters.

July 7th. Spine and cough better. Mesmerised twice; back and chest electrified.

July 8th. Suffering from head-ache. Mesmerised 3 hours in the forenoon. In the evening Mr. Parker and I visited Mrs. Bird, and found her much excited, a report having reached her (promulgated of course by an opposer of mesmerism,) reflecting on her character, insinuating that Mr. Parker and I visited her for immoral purposes: *a more wicked or false report could not have been invented*. But what will not our opponents do! They must be beaten and they begin to know it, though still trying to ward off the blow for a time. They scruple not to have recourse to the most *base expedients, setting truth utterly at defiance*. While they only rant about satanic influence, witchcraft, humbug, &c., &c., their conduct produces some amusement: but when they are base enough to attack the character of a female, on whom a word of reproach on that point has never before been breathed, *it must*, I think, be reprobated by all *respectable persons*, be their opinion of mesmerism what it may.—But to return to our patient who was bled and sent to sleep for three hours.

July 9th. Head much relieved, although she frets and vexes herself much, owing to the report alluded to yesterday. Mesmerised three hours in the morning and not again for the day, owing to my being suddenly called to see a sick relation some miles from Exeter.

July 10th. At half past 3 p.m. I found Mrs. Bird suffering from head-ache. Mesmerised her, when she said, "If mesmerised gold were placed on my forehead where the pain is, I think it would produce a soothing effect. It may

throw me into a deep sleep; if it does, you had better remove it soon after that takes place." I tried the experiment, which succeeded admirably. After two hours and a half, it was convenient that she should be aroused; I therefore awoke her, and she took tea; after which I again put her into sleep-waking and repeated the experiment with the mesmerised gold, with a precisely similar result. Slept three hours.

July 11th. The excitement respecting the report is much increased. Mesmerised three hours, during which she was tolerably composed. In the evening, when Mr. Parker and I arrived, we found Mrs. Bird suffering much in her head, and very soon after I got her asleep a convulsive motion of the eyes commenced. Then came several violent spasms, flying from the head to the heart, accompanied with great rigidity of the whole body, and excessive difficulty of breathing; indeed such were the symptoms, that had I not known the power mesmerism had over her, I should have despaired of her life. She was very delirious, but after a time became more calm, although the breathing continued painfully difficult. I now placed a highly mesmerised sovereign in her hand; she grasped it tightly, and then placed it on the pit of her stomach, and fell into a deep sleep. In five minutes the breathing and whole frame became as tranquil as can well be imagined. On arousing she felt exhausted, but was quite collected.

July 12th. Spirits still much depressed. Mesmerised twice, and said, she had irritated the spine during last evening, which made the cough worse.

July 13th. Spirits low and feels pressure on the brain, particularly on the centre of the forehead. Mesmerised three hours in the morning, during part of which time she was in the deep sleep; on coming out of which she said, "After the bleeding on the 22nd of this month, I shall feel weak and ill for a few days, then, IF NOTHING UNEXPECTED OCCURS, I shall gradually get better until the 16th of August, on which day I shall have very severe spasmodic affections: both hands will be contracted, particularly the left. You must relieve this by burning moxa on the nape of the neck; let the arms be rubbed with camphorated spirits and oil, twice a day, until they gain strength." Mesmerised again in the evening for three hours, when she directed that she should inhale from an infusion of certain herbs twice a day.

July 14th. Headache rather worse. Mesmerised twice; says, "The spasms which will take place on the 16th of next month, are entirely caused by her fretting about the report affecting her character."

July 15th. Head still bad. Mesmerised three hours in the morning, when she said, "The lungs are already benefited by the inhaling." They are mesmerically electrified daily. In the evening she was bled, then mesmerised, and when the first feeling of faintness had passed off, she desired me to throw her into the deep sleep, with mesmerised gold on her forehead. This was done, and, on again getting into sleep-waking, she alluded to the 16th of August, saying, "I cannot see my way clear; that day looks very dark to me." Slept four hours.

July 16th. Very weak, but head better. Mesmerised twice, and said, "The temporal artery must not be opened on Wednesday until about 8 o'clock p.m. *I shall begin to be very delirious between 5 and 6 p.m.*"

July 17th. Much mental suffering continues. Mesmerised three hours in the morning. In the evening I found Mrs. Bird considerably excited, having heard more of the *slanders that have been so falsely reported respecting her*. Mesmerised; soon after which a severe spasm came on, was followed by others, and she became insane. I now succeeded in getting her into the very deep state. Slept three hours and twenty minutes. On arousing she was calm.

July 18th. Spirits a little better, but the spasms continue. Mesmerised twice.

July 19th. Still poorly; spasms continue, and she has a *slight* attack of St. Vitus's dance. Mesmerised twice; says the action of the limbs will only last for a day or two.

July 20th. Less spasms, but great debility. Mesmerised 3 hours in the morning, and $2\frac{1}{2}$ hours in the afternoon. *Cramp and cough.*

July 21st. Better, with the exception of a pain in her head, which cannot be expected to be removed until blood has been taken from the temporal artery to-morrow evening. Mesmerised twice. Still unable to say how the 16th will terminate. Cramp & cough as yesterday.

July 22nd. Head very bad. Mesmerised three hours in the forenoon, and at times was slightly delirious. A little before 6 p.m., Mr. Parker and I found Mrs. Bird delirious, and she soon became *quite mad*, attempting to strike me and do all sorts of mischief. I could not get her to sleep, but still by determination and a strong exercise of the will, I kept her tolerably quiet, provided I did not take my eye off her. At 8 o'clock the temporal artery was opened, and, before much more than a tablespoonful of blood had flowed, she was quite collected and asked what we had done. As soon as the bandage was adjusted, I mesmerised her into sleep-waking and then into the deep sleep: on recovering from the latter she said, "I shall only have one more fit of coughing

which will be on Saturday evening. On Friday week the 31st I must take an ounce of tincture of rhubarb, and on Tuesday week I should be bled. I shall be cheerful while away," (Mrs. Bird is going to the sea side for a fortnight), "but my spirits will flag on my return." She again, after speaking of the spasm which will take place on the 16th of August, said, "After the application of moxa a stupor will come on, during which, bleed until I shew some signs of faintness; then put my feet into warm water with a little mustard in it for ten minutes, wipe them dry and put them on the sofa. If I rally from the stupor I shall do well; if not, one hour will only be left for me. The sufferings of that day are entirely produced by the unkind reports."

July 23rd. Better in every respect, but weak from the bleeding. Mesmerised. St. Vitus's dance has quite left her.

July 24th. Appetite improved, and is altogether better. Mesmerised three hours and a half in the morning and two hours in the evening.

July 25th. Still better. Mesmerised twice. During the morning sitting a thunder storm came on and she felt slight shocks through her system. She heard the thunder although no mechanical noise nor the voice of any one but that of her mesmeriser is audible to her. May not this be owing to electricity? She again assured me, that being without mesmerism until the 15th of August would not, in any way, affect the crisis on the 16th. *Cough as predicted.*

July 26th. Still better. Mesmerised two hours and a half.

Aug. 4th. Bled to sixteen ounces while at the sea-side.

Aug. 14th. Has not been mesmerised since the 26th ultimo. Mrs. Bird took the tincture of rhubarb on the 31st ultimo. The changeable weather has given her *very slight tic*. Mesmerised three hours and a half, and said, "My chest is nearly full of water," (her breathing is very difficult), "I have a slight cold, which has produced a little inflammation through the system and the stomach is disordered by it. I can give you no further directions as to the 16th. The spasms will commence at 5 o'clock."

Aug. 15th. Still feeling ill. Mesmerised three hours in the morning, and said, "I shall throw the water from my stomach before to-morrow morning; that is something in favor of my recovery. Your taking sal volatile or wine after I am bled, on the 16th, will be beneficial." On visiting Mrs. Bird in the evening, I found she had ejected three pints of water, and consequently the chest was much relieved. Mesmerised again for three hours.

Aug. 16th. Found Mrs. Bird at 10 a.m. very ill. Mesmerised her for two hours and a half, but she could not even now see her way through the afternoon attack; indeed there appeared to be in sleep-waking a very strong impression that she should not recover; not that she saw that would be the case, but all after the stupor appeared as a blank. At twenty

minutes after 3 p.m., Mr. Parker and I found Mrs. Bird looking and feeling as ill as it is possible to imagine; Mr. Parker's impression was that she would not recover. I mesmerised her into sleep-waking, and it was very beautiful to observe her perfect resignation, and touching to a degree to hear her express her *entire forgiveness of all who had injured her*. The gratitude she expressed towards Mr. Parker and myself for the attention we had paid her, *was unbounded*. At 5 o'clock the spasms came on, her screams were dreadful; before 6, both hands contracted, and Mr. Parker gave me a moxa to burn on her neck, as she had directed. Soon after it began to affect the skin, the hands flew open and were relaxed. Her other directions as to hot water, bleeding, &c., were attended to. She fell into the stupor, and was to all appearance dying. I persevered in keeping her as much under the influence of mesmerism as possible, wetting her lips with wine, and taking some myself, as well as several doses of sal volatile; this recovered her for a moment, but her tongue was convulsively drawn to the roof of her mouth; lower jaw dropping, limbs extended, and she was to all appearance sinking. This continued for nearly an hour, when her breathing became more easy; and she told me, in an almost inaudible voice, that she was better, but that as the reaction of blood-letting took place, she should suffer greatly. I proposed keeping her under mesmerism the whole night. This at first she was unwilling we should do, as it would fatigue us. However, Mr. Parker and I remained with her until 7 o'clock the next morning. She awoke spontaneously twice during the time, but I soon mesmerised her into sleep-waking. At 7 a.m. I aroused her. At 1 p.m. I again gave her three hours mesmerism, and kept her asleep the same time in the evening.

Aug. 18th. Thunder in the air, which causes a little oppression about the brain. Mrs. Bird last night ejected her supper; with one exception, this is the only time she has vomited any food since the early part of July, and on each occasion she had exerted herself sooner after a meal than is desirable. Before being mesmerised, she ejected her food daily for nearly thirteen years. Mesmerised twice.

Aug. 19th. Notwithstanding the weather, which is very damp, Mrs. Bird gains strength, and her general health improves. Mesmerised twice, and said, "My stomach is a little out of order; liver is inflamed; right lung dormant, but not much inflamed; nerves of the brain rather excited, but that will subside. The time of the day at which you mesmerise me is of no importance, until Tuesday, the 25th. At 4 p.m. on that day I shall suffer from cramp in the bowels. Soothing passes would be of benefit. If you were not with me there

would be no danger, only I should suffer more. I must have one ounce of tincture of rhubarb that night."

Aug. 20th. Mrs. Bird's cold has occasioned slight tooth-ache, but nothing worth the name of tic. Mesmerised twice. During the second sitting, she said, "Wild sage tea would do me good, and a poultice of toast and yeast, such as I have before used. The general inflammation through the system is much less."

Aug. 21st. Mesmerised twice, together six hours.

Aug. 22nd. Face much better. Mesmerised three hours.

Aug. 23rd. Still better; appetite good, does not eject her food. Mesmerised each day for some hours.

Aug. 25th. Mesmerised in the morning, and a little before 4 in the afternoon, with the cramp present.

Aug. 26th and 27th. Took rhubarb on the night of the 25th. Rather weak; mesmerised both days for some hours.

Aug. 29th, 30th, and 31st. Mesmerised each day twice. Health improving.

Sept. 1st, 2nd, and 3rd. Mesmerised each day. On the last, she said, "*I shall, soon after I am mesmerised to-morrow, have a sharp spasm, which will leave a head-ache; with this exception I shall get on tolerably until Tuesday, which day I do not see clearly.*"

Sept. 4th. Mesmerised six hours. Spasm came on as predicted, and left a head-ache.

Sept. 5th. Head-ache continues. Mesmerised twice, two hours each time; says Tuesday will be an uncomfortable day.

Sept. 6th. Head worse, (there is thunder in the air, and this always affects her.) Mesmerised once four hours; says she should be bled on Tuesday the 8th, or a severe spasm and delirium will be the consequence.

Sept. 7th. Mesmerised: head bad.

Sept. 8th. Bled, and then mesmerised three hours in the forenoon, and again two hours in the afternoon.

Sept. 9th. Head-ache gone; feels better, but weak. Mesmerised some hours.

Sept. 10th. Still better: sleeps at night. Mesmerised twice, together five hours; says the heart is now worse than any other part.

Sept. 11th. Mesmerised twice, together five hours.

Sept. 12th. Mrs. Bird has a little tendency to faint; the heat of the weather is intense. Mesmerised twice, two hours each time.

Sept. 13th. Just as yesterday. Mesmerised three hours.

Sept. 14th. Stronger, and able to sit up a longer time; but exertion causes palpitation. Mesmerised four hours, and said, "To-morrow, Wednesday and Thursday, will be very fair days; Friday and Saturday oppression about the head; Sunday I shall be very ill, but better on Monday."

Sept. 15th. Mesmerised five hours; says, "There is pain at the bottom of the right lung: I must rub into the side, just over that part, one-third of a grain of opium in an ointment, twice a day; and the inhalation must be altered:" (for this she gave a prescription); in other respects comfortable.

Sept. 16th. Not mesmerised.

Sept. 17th. Comfortable. Mesmerised twice, together five hours.

Sept. 18th. Severe *head-ache*, and feels ill. Mesmerised twice; spasm in the *head*; says she shall require bleeding on Sunday afternoon.

Sept. 19th. *As yesterday*. Mesmerised twice.

Sept. 20th. Mesmerised two hours and a quarter in the morning, and appeared as usual. At six o'clock in the evening, Mr. Parker and I found Mrs. Bird *very ill*, eyes sunk, and appears in a most deplorable state; she was bled, and then put to sleep. She first got into sleep-waking, and then into the deep sleep; remained in the latter one hour and a half, and, on again coming into sleep-waking, said, "The disease that is prevalent is not diarrhoea, but Asiatic cholera; it is in a milder form than it was some years since. *I shall have an attack of it this day fortnight*; but if you attend to my directions, I shall recover. It will come on in the night. I should drink as much water as possible, have some of the medicine which I have told you is good for that complaint, and be bled at 12 o'clock at noon." I kept her asleep upwards of three hours, when she awoke much more comfortable.

Sept. 21st and 22nd. *Better*. Mesmerised twice each day.

Sept. 23rd. Has had a slight fall in rising from the sofa, and sprained her arm and ankle, both of which were eased by local passes after she was put into sleep-waking. The spine is also a little injured, and causes a slight impediment in her speech; local mesmerism soon relieved it.

Sept. 24th. Feels the shake, but is otherwise improving. Mesmerised twice.

Sept. 25th. Mesmerised three hours. Feels tightness on the chest; said during sleep-waking, "I shall on Sunday and Monday be tolerable; Tuesday and Wednesday, a sick head-ache; Thursday and Friday, better; Saturday, not so well."

Sept. 26th and 27th. Mesmerised some hours each day, and during sleep-waking coughed up a considerable portion of phlegm, which relieved her chest.

Sept. 26th, 27th, 28th, 29th, and 30th. Mesmerised twice on each day. *Sick head ache on the two latter*.

Oct. 1st. *Much easier*. Mesmerised three hours and a half.

Oct. 2nd. *Rather uncomfortable*. Mesmerised twice, together five hours, and said, "On *Sunday (4th)*, as I have told you, I shall be very ill: I must be bled at 12 o'clock, but not mesmerised until 5 p.m., as the bowels will not cease to act until that time; I must take a dose of the medicine I have prescribed every two hours until the action on the bowels begins to subside. I may have a little wine Monday and Tuesday. I shall be some days better and some worse until the following Sunday, when I must be again bled. I shall then get on as usual until the 21st; bleed me in the evening of that day. On the 28th, I shall be *very ill* from spasms, faintness, and delirium; bleed me in the evening. On the 29th and 30th I shall feel ill. On the 31st, a change will take place, and I shall improve

daily to the end of the year, that is, if no EXTERNAL circumstance occurs to throw me back. Let me take every third day, commencing from the last day of October to the 31st of December, half a tea-cupful of infusion of furze-blossom and sting-nettles, with a quarter of a glass of sherry, and ten drops of essence of coriander or carraway seeds; it must be taken warm on going to bed. After the last day of November I shall not require so much of your attention.

Oct. 3rd. Feels poorly. Mesmerised twice, together four hours and three quarters.

Oct. 4th. Mr. Parker bled Mrs. Bird at 12 o'clock; she was suffering from *Asiatic cholera*; her nails were blue round the quick, and blood glutinous. The attack commenced at 4 in the morning (the medicine had been left the evening before, with directions to be taken if the bowels were acted on; Mrs. Bird was of course not told what would take place), with vomiting, soon after a violent action of the bowels came on, accompanied with severe cramp. Evacuations like rice water. At 5 o'clock p.m., I mesmerised her, and kept her asleep five hours. It will be recollected *she had predicted this attack fourteen days before it came on.*

Oct. 5th, 6th, and 7th. Mesmerised twice each day, and is better, but weak.

Oct. 8th and 9th. Better. Mesmerised several hours each day.

Oct. 10th. Not so well. Mesmerised some hours.

Oct. 11th. Poorly. Mesmerised twice, and bled.

Oct. 12th, 13th, 14th, 15th, and 16th. Some days a little better than others. Mesmerised twice each day, except the 15th.

Oct. 17th. Took an aperient draught, as she had directed on the 14th.

Oct. 18th and 19th. Mesmerised some hours each day, and on the latter, said, "I should not eat much animal food for the present. Rice and tapioca are good for me."

Oct. 20th. Suffering from an attack on the bowels, produced by a slight cold. Mesmerised twice.

Oct. 21st. Bowels still out of order. Mesmerised twice, prescribed for herself, and took the medicine; bled in the evening.

Oct. 22nd. Bowels much quieter. Mesmerised twice.

Oct. 23rd and 24th. Mesmerised twice each day, and feels better.

Oct. 25th. Just as yesterday. Mesmerised once.

Oct. 26th. Mesmerised twice, together four hours and a half: said, "My spirits will be bad up to Wednesday night. Bleed me as soon as convenient after 6 o'clock on that evening." Has a little head-ache.

Oct. 27th. Head-ache increased. Mesmerised twice.

Oct. 28th. Found Mrs. B. in the evening *suffering much* from head-ache and depression. Mesmerised two hours and a half. In the afternoon, about $\frac{1}{2}$ past 4, Mr. Parker and I visited Mrs. B.; she was looking very ill, eyes particularly dull, and she was a little incoherent in her conversation; this increased until she became quite delirious. Spasm as predicted. At 6 o'clock she was bled, but faintness was not produced until twenty ounces of blood had been taken. Up to this time mes-

merism had not been attempted, Mrs. Bird having told me it would not produce sleep. As soon as the arm was secured I sent her into sleep-waking, and she said, "I am very weak, but my complaints are cured: I shall after a day or two gain fast. The mechanical injury I received on the top of my head, when young, may produce occasional delirium.

Oct. 29th. Mesmerised twice, and is suffering from reaction after blood-letting.

Oct. 30th, 31st, and Nov. 1st. Mesmerised each day, and is better: but her spirits are depressed, owing to the base attacks on her published in the Exeter papers, where she is week after week branded as an impostor, because some of the opposers of mesmerism cannot understand the arsenic affair; and they have not the fairness to wait until the case is published, but take hold of all the scraps of conversation, whether true or false, that are reported to have fallen from any one connected with the case. They harp a great deal about arsenic, enough to kill twenty men, and say there is a written statement that I have asserted this to be the case. I can only say, whoever has written a statement to this effect, must have mistaken what I said, as I never even thought that such a quantity of poison had been vomited: indeed, how much arsenic the gritty substance contained I could form no judgment of, until I received Dr. W. Gregory's analysis in the middle of November. It may seem strange for me to speak of November here, but this part of the case had not been transcribed from my notes when Dr. Gregory's letter arrived.

Nov. 2nd, 3rd, and 4th. Spirits very low. Mesmerised many hours each day.

Nov. 5th. Mesmerised twice, and had a dreadfully severe spasm through the head through fretting.

Nov. 6th. Frightfully ill owing to the effects produced by the continued published attacks on her character. Mesmerised three times, two hours each; says there will be a change one way or another before half-past 5 o'clock to-morrow evening.

Nov. 7th. Ill all day. Mesmerised twice. At a little after 5 p.m., a most severe spasm came on; her convulsions were dreadful to witness.

Nov. 8th, 9th, and 10th. Rather better, but the spasm of the 7th has greatly reduced her strength.

Nov. 11th. Vomited her breakfast this morning, owing to again exerting herself too soon after eating. Mesmerised twice.

Nov. 12th, 13th, and 14th. Mesmerised some hours each day, and is gaining strength, although slowly.

Nov. 15th, 16th, 17th, and 18th. Mesmerised twice each day. Not much change.

Nov. 19th. Mesmerised twice, and said, "The circulation of

blood is more free; I should take warm liquids, but no wine. The tea must be omitted for the present. I should have three frankincense pills for three nights, a moderate dose of squills the following mornings, and some magnesia the fourth night. Her directions were followed, as on every other occasion.

Nov. 20th. Mesmerised twice, gains strength slowly.

Nov. 21st. Still better in the morning: but, after seeing a letter in the *Western Times*, declaring her to be an impostor, and stating some direct falsehoods respecting her, the brain became irritated. In the afternoon she was delirious, and very ill. I mesmerised her three times to-day, and on the last occasion, after having been some time in the deep sleep, she, on again getting into sleep-waking, said, "You must soon decide. I have been looking at myself; if you do not bleed, I shall be insane for life; and if you bleed, I do not know that you will be able to recover me from the faintness." Mr. Parker, who was present, immediately opened a vein in Mrs. Bird's arm (I having first aroused her), and bled to indications of faintness. I then again commenced mesmerising her, but had very great difficulty in recovering Mrs. Bird from the faintness; indeed she appeared, both to Mr. Parker and myself, to be dying; her tongue was convulsed, breathing scarcely discernible, and in the midst of all this her jaw became locked; but I soon relieved it by the means I had before used. After about half an hour she recovered a little, and was able to swallow small quantities of wine. My taking strong doses of dilute sal volatile, seemed to have a beneficial effect on Mrs. Bird.

Nov. 22nd, 23rd, 24th, 25th, and 26th. Mesmerised twice each day, except the 25th. Very ill on the first three days, but has gained strength since, and her spirits are improving.

Nov. 27th and 28th. Mesmerised twice each day; is suffering from tic, but not nearly to the extent she did before. Mesmerised. Mrs. Bird has a severe attack of influenza. On the latter day she said, "I shall suffer from tic during the night, but it will be better by the morning. I shall have a spasm in the kidneys on Tuesday between 7 and 8 p.m."

Nov. 29th, 30th, and Dec. 1st. Has suffered from tic. The spasm took place as she predicted. The influenza has caused great weakness. Spirits better.

Mrs. Bird has, during sleep-waking, the power not only of looking through her own system, but also that of any persons who may be brought before her, and can give directions for the treatment of their diseases. In no one instance in which her recommendations have been *fully carried out*, have they, as far as I am aware, failed to procure relief: and

I am authorized by Mr. Parker to state, that she has most successfully prescribed for many patients by his merely giving their symptoms, and that frequently after the ordinary medical remedies have failed, especially in violent cases of typhus fever, diarrhoea, external inflammation, consumption, rheumatism, and tic douloureux. Mrs. Bird can also give the phrenological development of any person's brain who may be present, when she is in sleep-waking. One case I will mention. A lady, with whom Mrs. Bird was *not previously acquainted*, entered the room *after* Mrs. B. was mesmerised, and the lady herself declared that Mrs. B. had given as correct a description of her character as if she had known her twenty years. The lady wore a *thick dark bonnet the whole time* she was present. There have been several other equally striking instances, but space forbids my entering into their details.

It may now be asked, what benefit has Mrs. Bird herself derived from mesmerism, as she is still reported to be a great invalid? My reply is, that external circumstances weighing on her mind are the cause of her *present bodily sufferings*, as I venture to assert (and in this I am borne out by Mr. Parker's opinion) that a great majority of the spasmodic affections she has lately suffered from, have been *produced by mental depression*. *Even conscious innocence cannot bear up against continued public detraction*. It will be seen by reference to Mr. Parker's statement, that Mrs. B. was (previously to being mesmerised) suffering daily from violent epileptic fits. She vomited nearly all her food, and her agonies from tic were scarcely to be endured. She has not had a fit since the 9th of June, and only three since the 1st of January. The tic has been in comparison (except when *mentioned* in the previous part of the case) next to nothing since the first day she was mesmerised; and she has vomited food but three or four times since the early part of July, and in every instance has this been occasioned by her moving too soon after eating. Mrs. B.'s side (uterus) now causes her no inconvenience.

I, in conclusion, hope that the interest of the case will be sufficient apology for my giving it in the form of a diary; and should the perusal of these pages induce but one person to persevere in a mesmeric case, notwithstanding apparently insurmountable difficulties, it will greatly add to the pleasure I have received during the progress of my labours. *Many cases I am confident fail for want of sufficient time being devoted to them.*

Much has been said respecting the substance which Mrs. Bird ejected from her stomach, and of course the antimerists in the neighbourhood cannot be induced to believe one word about her having vomited any substance containing arsenic. Some report that we assert she vomited pure arsenic; others insinuate that the substance which I say she vomited did not come from her stomach, but was placed in her mouth and from thence ejected merely for the purpose of deception; and this they considered proved, when it was discovered that Mrs. B. had caused arsenic to be purchased some little time before she vomited the gritty substance. I was aware of this months before they said a word about it; Mr. Parker knew it at the time it was procured; and who will it be supposed was our informant? Why Mrs. Bird herself! The fact is, the arsenic was never in her possession, but was brought by the chemist of whom she purchased it for the purpose of his using it in her garden, mixed with salt, to destroy slugs. The evening proving wet, he came over the next morning and buried it in the earth. During the night it was in Mrs. B.'s house; a person at the time staying with her had it *locked away and kept the key*, so that Mrs. Bird did not know where it was placed; and had she, there was no means of her getting at it.

As I am one of those foolish people who condescend to believe what they see, my opinion on the subject would not have been altered if Mrs. Bird had kept any quantity of arsenic in her possession. I assert (and I flatter myself *that at least those who know me, and whose opinion I value, will not doubt my word*) that on two occasions a gritty substance, subsequently found to contain arsenic, *was in my presence ejected from Mrs. Bird's stomach*. As to her having concealed it in her mouth, that is quite out of the question, for she could not, during the time I was with her before it was ejected, have spoken plainly had there been anything in her mouth. Besides which, how was she to get it into the state in which it is, for anything to all appearance less like arsenic can scarcely be conceived. In one point of view it is perhaps unfortunate that Mrs. B. should have purchased arsenic at this particular time, as it enables *uncandid people to insinuate* that the said arsenic has been used for the purposes of deception. But leaving out of view the circumstance of both Mr. Parker and myself knowing all about her having procured the article, Mrs. B.'s openly sending for arsenic is I think a clear proof that no trick was intended, and *strongly confirms* my statement that she, on arousing, recollects nothing that has taken place during her sleep-waking. An impostor would

not, I should say, do what would lead to *certain* detection. Added to this, the watery rash, garlic eructations, and pain in the calves of the legs, are indications of the presence of arsenic in the system. All these she experienced and complained of to Mr. Parker, *long before* mesmerism was even named in this neighbourhood.

Once more; must not the system from some cause have been much paralyzed, to allow of very good sal volatile being taken with only two parts out of three water? and I have, at the time she prescribed it for herself, *often* seen her take it of that strength. I hope I shall be excused this digression, as I feel, on Mrs. Bird's account, strongly on the subject, she having been branded as an impostor by those who can know nothing of her case.

My friend, Mr. Janson, has examined the ejected substance under a powerful microscope, and is satisfied *it is not a mechanical mixture*.

Mr. Herapath, the eminent chemist, has published the following letter in the *Western Times* :—

"To the Editor of the Western Times.

"Bristol, Dec. 2nd, 1846.

"Sir,—My attention has been called to a controversy which has, for some time, been carried on in your city, upon the reality of certain exhibitions and statements in relation to mesmerism, and I have been solicited by the exhibitor on one side, and opponents on the other, to express an opinion upon the possibility of a large quantity of arsenic ('enough to kill 20 men') remaining in a living stomach for many years, and then of having been thrown up during mesmeric clairvoyance. Of course in the absence of more definite information I could, in reply, merely state that no such case had ever occurred in my experience, or within the course of my reading. Since then, Mr. Parker, surgeon, of Exeter, the exhibitor and advocate of mesmerism, has called upon me with the matter said to be ejected, and having expressed a wish to have all the facts enquired into, I obtained from him a small portion of each of the two packets, one of which he said had been caught and identified by a gentleman who was present at the time of ejection, and the other which had not been so identified. I have submitted those to chemical enquiry, and I find them to be nearly alike in appearance and chemical composition. They are pulverulent, and slightly agglomerated, the colour whitish—or rather white, with a shade of brown. The microscope shews the structure to be crystalline, and capable of depolarizing light; they contain one-twentieth part of their weight of arsenious acid, combined with lime as arsenite of lime; the remainder is crystalline carbonate of lime, with a little organic matter of animal origin. I did not weigh what I saw in Mr. Parker's possession, nor have I any means of knowing the entire weight of what

was said to be ejected—what I received was half a grain of the identified, and four-tenths of a grain of the other, and I should judge them to be a tenth part of what I saw. If I am right in this, the total quantity of arsenious acid in it would be under half a grain—a quantity certainly not enough to kill an adult human being, and especially as it is partly neutralized by lime, which, to a certain extent, destroys its poisonous qualities. The smallest quantity of uncombined arsenious acid which is recorded as destroying life from its action on the stomach is six grains, and that was in the case of a child.

“Such a compound as that I refer to might be formed if ‘arsenical solution,’ arsenite of potassa and lime water, were mixed together in a neutral solution containing animal matter;” but I cannot understand how it could remain in a human stomach for years, knowing as I do that the contents of almost every stomach is *acid*, from the presence of free hydrochloric acid and biphosphate of lime, both of which would constantly tend to dissolve and decompose it.

“I have neither the time nor the inclination to be drawn into a controversy of such a length as this appears to be, and I would respectfully recommend the belligerents to abandon the mere expression of opinion, and to resort to the application of *practical tests* to prove or disprove the possession of the powers claimed—thus *strangers* with diseases *not apparent* might surely be subjected to the clairvoyant by disinterested persons. If she judges rightly in a majority of cases, a favourable opinion would follow, and in the Exeter Infirmary patients about to submit to surgical operations could be mesmerised—if only two or three of them underwent the operations without feeling pain more would be done to establish mesmerism than by writing hundreds of columns in newspapers.

“I am, Sir, your obedient servant,

“WILLIAM HERAPATH.”

It will be observed that Mr. Herapath considers both the specimens given to him by Mr. Parker “nearly alike in appearance and chemical composition.” Dr. William Gregory, to whose report I shall hereafter refer, coincides in this opinion. I therefore consider it proved that the substance ejected in my presence, and what was before vomited, are essentially identical in their contents. With regard to Mr. Herapath’s assertion that he cannot understand how it could remain in the human stomach so many years, &c., it must be taken with the due consideration that, although a *most eminent chemist*, he is *not*, I believe, a medical man; and also that the question was put to him, as to arsenic enough to kill twenty men. I should before have stated that the entire quantity of gritty substance ejected by Mrs. Bird is about

u “The patient is said to have formerly taken these as medicines at the same time.”

one drachm. It has been stated that Mrs. B. took but a single half ounce of liquor arsenicalis, which would contain rather more than two grains of arsenic. This is *not the case*, as Mr. Parker well knows from statements received when he in 1834 became her sole medical attendant. The liquor arsenicalis was sometimes procured by her late husband, and sometimes by a servant. Mr. Bird, being in a public office, was in the habit of purchasing things at different chemists who frequented the office in which he was engaged. I mention this, as a druggist in Exeter has stated that only once did he make up a prescription for Mrs. Bird containing arsenic. Her then medical attendant, from whom Mrs. B. received the greatest kindness and attention while under his care, frequently himself brought medicines in his pocket for her; but whether that containing liquor arsenicalis formed any part of them, we have no means of ascertaining.

I now with great pleasure come to the analysis and opinion of Dr. William Gregory, Professor of Chemistry in the University of Edinburgh; but before doing so, I confess my utter want of language *adequately* to express my sense of the obligation we are under to him for the unremitting attention he has paid, and trouble he has taken, to determine the contents of the substance submitted to him, and also for allowing us to publish so full a report of his labours and opinions. Dr. Gregory, it will be recollected, is not only a chemist, but also an eminent physician, and the translator of all Liebig's works on chemistry known in this country.

Dr. Gregory's Analysis, extracted from a letter addressed to Mr. Parker.

"297 milligrammes of the powder, about 4·5 grains, were boiled ten times in succession, each time with about 30 grammes of distilled water, and the solutions filtered, united, and evaporated to dryness in the vapour bath. The liquid when very concentrated became covered with a film, which is the case with a solution of arsenite of lime. A little organic matter, of a brown colour, separated towards the end of the evaporation, but when dry the residue was nearly white, the organic matter being masked by the arsenite of lime. It weighed, after being heated for a long time at 212°, 45·5 milligrammes. This dried mass had all the characters of a similar one obtained by boiling arsenite of lime with water, and drying up the solution. In both cases the film appeared, and if any crystallization existed in the dry mass, it was very confused in both.

"The mass was dissolved in boiling water and filtered from a little organic matter which had become insoluble, or at least was not dissolved by this smaller quantity of boiling water. The solution in both cases was slightly alkaline to very delicate test-paper, indicating

the presence of basic arsenite of lime. It gave a yellow precipitate with nitrate of silver. In short, the solution was a nearly pure solution of arsenite of lime. In order to have a control for the quantity of arsenic present, I acidulated the liquid with hydrochloric acid, and precipitated the arsenic by a current of sulphuretted hydrogen gas. The sulphuret of arsenic was formed very abundantly, and of a perfectly pure yellow colour. After standing in a warm place till all the smell of sulphuretted hydrogen was gone, the liquid was thrown on a filter, and the sulphuret of arsenic well washed. It was then dissolved in ammonia, the solution dried up, and the residue, sulphuret of arsenic, with a trace of organic matter, after being heated to 212° for half an hour, that is, till it ceased to lose weight, weighed 30.0 milligrammes, equivalent to 24.1 milligrammes of arsenious acid, or to 44.9 milligrammes of basic arsenite of lime.

"The matter dissolved from the powder by boiling water therefore consisted of,

Basic arsenite of lime	44.9 milligrammes.
Organic matter and loss	0.6 ,,
	<hr/> 45.5

And it contained 24.1 milligrammes, or about 0.372 of a grain ($\frac{1}{3}$ grain) of arsenious acid.

"That portion of the powder which had not been dissolved by the boiling water contained the carbonate of lime, coloured by organic matter. It was dissolved, as well as what remained on the filter through which the boiling solutions had been filtered, in dilute hydrochloric acid; the solution neutralized by ammonia, (which was added in slight excess, but caused no precipitate, indicating the entire absence of phosphate of lime,) and precipitated by oxalate of ammonia. The precipitate was collected on a filter, well washed and dried. After being heated to 212° , till its weight became quite constant, it weighed 340 milligrammes, equivalent to 233 milligrammes of carbonate of lime. I should have said that the greater part of the organic matter remained undissolved when the original carbonate was acted on by hydrochloric acid, but its quantity was so small, and it adhered so tenaciously to the filter, that it was absolutely impossible to make a determination directly of its weight. It gave out when heated on platinum a smell of burnt animal matter, and no doubt contained a little albuminous or gelatinous matter.

"The result of the whole analysis, therefore, is as follows :

Carbonate of lime	233 milligrammes, or 3.989 grains.
Basic arsenite of lime . .	44.9 ,, 0.372 ,,
Organic matter and loss .	19.1 ,, 0.138 ,,
	<hr/> 297.0 ,, 4.500 ,,

Or in 100 parts.

Carbonate of lime	78·45
Basic arsenite of lime.....	15·11
Organic matter and loss.....	6·44

100·00

The proportion of arsenious acid in 100 parts is therefore 8·11.

“Before analyzing the powder, I again examined various portions of it under the microscope, and in many instances I perceived some irregular fragments having a decided appearance of crystallization; but the mass of powder is amorphous, under the weak power which I employed. The crystallized portions have not in any degree the aspect of the powder of arsenious acid; they much more resemble grains of carbonate of lime; and the observations of Mr. Herapath, made with a higher power, shew, I have no doubt correctly, that the mass of the powder is crystalline carbonate of lime.

“From all these observations, joined to those in my former letters, I am decidedly of opinion that the arsenious acid present in the powder is entirely in the state of arsenite of lime, and that it consequently has not been introduced into the stomach or into the powder in the form of the powder of arsenious acid.

“Considering that your patient took the arsenic in the form of the liquor arsenicalis, and was at the time in the habit of taking lime water, (a very unchemical prescription, by the way,) it is quite easy to see how arsenite of lime should be formed in the stomach along with carbonate, and once formed, its great insolubility would not only account for its being found there after so long a time, but would also explain how so considerable an amount of arsenic should remain in the stomach without producing dangerous or even fatal effects. At the same time it is quite possible that a very small portion might occasionally be dissolved, and produce some of the toxicological effects of arsenic as long as it remained. We must bear in mind, too, that the arsenite of lime, besides its own insolubility, was further protected by the presence of carbonate of lime in large excess, and of agglutinating organic matter, which must have defended it from solvent action. That it must have been agglutinated is obvious, otherwise it could not have remained in the stomach; and there can, I think, be no doubt that, from the very peculiarly morbid state of the stomach and digestive powers, the solvent energy in this case was reduced to a minimum, and that, when the patient's health began to improve, and her stomach to assume in a greater degree its normal powers, the agglutinating matter was absorbed, and the insoluble mass, thus disintegrated, and more exposed to solvent action than before, may have excited vomiting, and thus caused its own rejection. The physical appearance and chemical character as well as the composition of the powder, indicate very clearly that it has been the result of slow action, the organic matter being equally diffused in every part. It is out of the question to suppose that the powder could have been formed artificially by mix-

ing arsenious acid with carbonate of lime; for the arsenious acid has certainly not been introduced as a powder. I should say it has been precipitated in the stomach by degrees, carrying with it some organic matter, as all precipitates do in animal fluids; and I look on the characters of this powder as demonstrative evidence that it has been formed by a slow process in the stomach.

"From what I have already said, you will perceive that I do not see any reason why such a powder, enveloped no doubt in organic matter, should not have remained in the stomach for any length of time, as long as it formed a coherent mass, and that without destroying life. The arsenite of lime is so insoluble in water, and above all in cold alkaline solutions, that I should not hesitate to take a considerable dose of it. I should think a very large quantity would be required to destroy an animal, and the experiment might be made; always remembering that when enveloped in a large excess of carbonate of lime, and agglutinated by organic matter, it is still more insoluble than when pure. I do not therefore entertain a doubt, that 60 grains of this powder, containing 9.06 grains of basic arsenite of lime, equivalent to 4.86 grains of arsenious acid, might, under the circumstances, remain for any length of time in the stomach without producing fatal effects; although the patient might suffer in some degree from its presence. It is not certain that 4 or 5 grains of arsenious acid would prove fatal even if pure and uncombined, although it might probably do so. But it is probable that there was originally much more of the powder, and that it has gradually yielded to the solvent actions to which it has been exposed. The symptoms observed, more particularly the vomiting and the garlic eructations occurring after the use of salt, would seem to indicate that some portion, no doubt a very minute portion, of arsenic has been in some way dissolved, possibly by free hydrochloric acid, and has then acted on the system from time to time; and it is probable that, had no marked change taken place in the health of the patient, the same slow process of solution might have continued for an indefinite time. A sudden increase in the action of the absorbents has apparently hastened the termination of the process, and disintegrated the offending mass or concretion, so that the residue of it has been ejected from the stomach.

"The question having been specifically put to me, whether the gritty powder had the appearance of a mixture recently made with a view to imposture, I have no hesitation in saying, that it does not appear to me to possess in any degree the characters of such a mixture. The crystalline carbonate of lime, I think, must have been slowly formed in a solution containing organic matter, and the uniform diffusion of the organic matter in the powder leads to the same conclusion. It seems to me exceedingly improbable that an impostor should have thought of converting the arsenious acid into arsenite of lime; and, had the powder been a mixture of the kind suggested, the arsenious acid in all probability would have appeared in it uncombined, and in the form of white grains, of which there is in fact no appearance.

"Even supposing an impostor to have known the mode of forma-

tion and the chemical characters of arsenite of lime, I consider it in the highest degree improbable that he should have been able to form such a powder as that which I have examined. I am sure that to imitate it would be a very difficult task for the most dexterous chemist.

(Signed) "WILLIAM GREGORY."

Mrs. Bird has for years had an insurmountable dislike to salt (first engendered by the unpleasant eructations previously alluded to), and consequently she never takes any with her food; hence it is more than probable that she has *less* hydrochloric acid in her stomach than is found in that of most other persons, and this would account for the arsenite of lime being so little acted on by the gastric juice.

J. C. LUXMOORE.

Rose Mount, Alphington, Devon.

* * It is impossible for us to publish this case without expressing our admiration of Mr. Luxmoore's indefatigable kindness to the afflicted lady. He resides nearly four miles from her house, is a private gentleman, and a county magistrate, and his arduous exertions were prompted solely by benevolence and the love of scientific truth. Mr. Parker's noble conduct is likewise above all praise, surrounded as he is by brother medical men reviling him and mesmerism from morning to night. The case treated so perseveringly by Mr. Janson, and detailed in our last number, does him infinite honour: and the great ability and untiring unflinching courage with which he has long castigated the ignorant and venomous foes of mesmerism in the Exeter papers lays us all under deep obligation to him. He has compelled them to know and speak of *The Zoist*, which they would fain not know, or pretend not to know. The medical body of Exeter, with the exception of Mr. Parker, as far as we are aware, have acted a sad part by despising mesmerism, which properly belongs to the profession, and by allowing two gentlemen not of the profession to stand forth proudly as its noble champions, cultivators, and propagators in their stead.—*Zoist*.

IX. *More painless Surgical Operations. Report of a Committee at Calcutta in favour of the truth and utility of Mesmerism. New mode of inducing Coma, and the CONVERSION OF THE PROFESSION TO THE DUTY OF PREVENTING PAIN IN OPERATIONS.* By Dr. ELLIOTSON.

"On Thursday evening Mr. Rumball entered upon an elaborate, and most lucid and logical, exposition of the fallacy of the entire system under review. Clairvoyance, Somnolency, Somnambulism, Phreno-Mesmerism, Metallo-Mesmerism, Rigidity of Limb, Insensibility to Pain, &c., &c., &c., all fell prostrate one after the other before his almost inspired onslaught. Never did believer exert himself with more fervor, more tremendous energy, to establish a faith, than did Mr. Rumball on Thursday night to destroy one. He stood like a Luther before the hundreds of intently-listening believers and infidels present, and scattered into 'thin air' cloud after cloud of the more than Romish accredited superstitions and miracles of mesmerism. Names, places, dates, circumstances, facts, were adduced with the utmost minuteness of detail, and 'case' after 'case' was brought under the searching test of the long experience, the varied knowledge, the extreme logical perspicacity, of the lecturer; and, to our apprehensions at least, the total and almost sky-reaching fabric of the 'Science' fell to the ground before him, tower after tower, buttress after buttress, till at last the very basements sank into nought, and of all the edifice but late so erect and aerial the merciless disenchanting axe of the lecturer

'Left not a rack behind.'

"Then, apparently excited into irresistible truthful passion by the recurrence to this part of his subject, he went on to denounce Dr. Elliotson as a man who had descended from the pedestal of his legitimate professional renown to disport in the fields not only of 'blarney,' but of quackery, of cheating; and had there continued so to prank it, even after his meannish proteges, the notorious girls Okey, had been demonstrated by Mr. Wakley to the whole medical and scientific world to be nothing better than impostors of the most despicable order, and Dr. Elliotson, as a consequence, to be either their accomplice or their dupe. But, Mr. Rumball did not stop here: in language of extreme power, but in a manner as veiled and delicate as the presence of an audience of which the better sex constituted the larger portion rendered decorous, went on to show, in Dr. Elliotson's own words (in the *Zoist*) how seductions and debaucheries could be and had been practised under the specious pretences and jargon of mesmerism;* and reprobated the whole as not only an imposture, but as a thing dangerous, and not addoin fatal, to domestic peace and virtue.* As for the Cherbourg case, Mr. Rumball simply refused his assent to its relative veracity."—Account of a Lecture at Jersey against Mesmerism, by Mr. RUMBALL, SURGEON. *Jersey and Guernsey Military and Naval Gazette*, May 2nd, 1846.

"Being then the Professor of Medicine at the University College, London, and Physician to the North London Hospital, Dr. Elliotson was at that time one of the most rising physicians in the metropolis, and enjoyed a very extensive practice. His publications had gained him honour and esteem in the medical and scientific world, and he was universally looked on as one of the shining lights of our profession, &c. With the ardour of an active mind, the perceptive faculties much overbalanced by the contemplative, he rushed headlong and blindfold into all the mysteries of mesmerism in its most extravagant absurdities, &c. Dr. Elliotson was a perfect dupe; his love of the marvellous allowed him to pass beyond the bounds of the possible, and the governors to save their hospital and school from ruin, were obliged by requesting the doctor's resignation† to put a stop to the disgraceful scenes daily enacted."—An Anonymous Surgeon. *Western Times*, Exeter. Dec. 19, 1846.

I. *Painless removal of a Tumor weighing 112 POUNDS.*

By the kindness of Dr. Ashburner I am enabled to give the following extract from the *Bombay Bi-Monthly Times*, of Oct. 15—Nov. 1.

"The Committee appointed by Government to report on the value of mesmerism in surgical operations, have handed

* SHOCKING UNTRUTHS.—*Zoist*.

† This is rather amusing, since no speculations are to be found in any of my writings or lectures, and I have given to the world nothing but solid facts which have all stood the test of experience: and I have been considered by the profession as so acute and faithful an observer,—to have such sharp eyes, ears, and finger-ends, and "perceptive faculties," that my diagnosis of cases was sought for from all parts of the country. Whether deservedly or not, I will not pretend to say: but so it was. Dr. Simpson of York told me that Dr. Locock declared to him that my diagnosis was considered all but superhuman.—J. E.

‡ This is an ENTIRE UNTRUTH. I resigned spontaneously, and took the

up their opinion to the authorities. The committee had met *fourteen* times, each sitting being of *two hours'* duration. Appended to their report were minutes of all proceedings, and details of the different cases which had been kept. It is to be hoped their enquiries have tended to prove the value of the science, and that they will induce Government to introduce its practice into general use. Of the value of mesmerism in surgical operations, Dr. Esdaile has supplied abundant evidence. The *Calcutta Star*, of the 15th Oct., published an account of the removal of a tumor the day previous from a man's body which weighed *seven stone*, which occupied six and a half minutes in the performance;—the patient *moved neither muscle or limb during the time it was being removed, and did not awake till roused with a view of being given some wine and water!* There could be no mistake in the matter: the operation was performed in the presence of Mr. Halliday, Mr. Beadon, Mr. Young, Mr. Hume, Dr. Mc Pherson, Dr. Jackson, Dr. Stewart, Dr. Burt, Dr. R. Stuart, Dr. Taylor, and Dr. Hufnagle.

"We subjoin the report of the operation entire from the *Eastern Star* of the 16th ult. It puts the question of the advantages of mesmerism beyond a doubt:—

"*Report of Dr. Esdaile's last Mesmeric Operation at the Native Hospital.*—*Calcutta*, 11th October, 1846. Hurromundoo Laha, aged 27, hearing that I was in Calcutta, came to the Native Hospital to-day with an enormous scrotal tumor. It measures *seven feet* in circumference, and two feet round its neck. The disease began seven years ago with hydrocele, and its progress has been very rapid during the last three years. He has monthly attacks of fever, when the tumor swells, and discharges water. Although the tumor is actually *as large as his whole body*, (he appears to be about eight stone weight,) his person is in tolerable condition, and his constitution does not seem much broken. 10th. He was mesmerised to-day for the first time for two hours. He slept profoundly, and was partially cataleptic. 11th. No mesmeric

whole college by surprise; and such was the universal consternation, (for I resigned in the middle of my course of lectures, because I was forbidden to give my patients the blessings of mesmerism), that neither members of the council nor professors would believe my resignation at first. They were at their wit's end to supply my place: and at last *went* to Dr. Copland, whom they prevailed upon to fill up the gap; but *applied* afterwards to another whom they engaged permanently. The writer must have told this untruth wilfully, because the facts are notorious, were published, even in the last *Zoist*, p. 425, to which I refer every person. Mr. Rumball is reported in the *Mirror* of 1845 to have made the same assertion. But if he made it, he made it barefacedly: the present cowardly writer hides his face with crape, and would be fit for Italy were he not an Unitarian.—J. E.

effects to-day, on account of his system being deranged by fever. 12th. The mesmeric phenomena are less striking than on the first day. He is still feverish. 13th. This day being excessively rainy, I did not go to hospital, thinking the gentlemen interested in the progress of the case would not venture to the hospital in such bad weather. At 2 o'clock p.m. I received a note from an amateur who had gone to watch the progress, informing me that the patient had that day exhibited the most perfect *cataplexy*, and might have been made into "*minced meat*" without knowing it. 14th. The same appearances being present as yesterday, I proceeded to operate on him. The tumor had daily been tied up in a sheet, to which was attached a rope rove through a pulley in a rafter. The first part of the operation was performed without disturbing him, as he lay; the mattress was then hauled down till his pelvis rested on the end of the bed; his legs were held asunder, and the pulley put in motion to develop the neck of the mass. It was transfixed with a long two-edged knife, and removed by circular incisions, right and left. The flow of venous blood was appalling, but soon moderated under general pressure of the operator's hand. The arterial bleeding was not formidable, and was not a source of danger. The mass, half an hour after its removal, weighed 103 lbs., and with the blood and fluid contained in it, must have been *upwards of eight stone weight*. During the whole operation, *I was not sensible of a quiver of the flesh or the slightest movement of his limbs or body*. Dr. Duncan Stewart held his pulse all the time, and had the best opportunities of observation; he has kindly furnished me with the following notes.—JAS. ESDAILE, M.D.'

"The time occupied in the operation was *six minutes*, including the application of ligatures to the spermatic arteries, and three or four other vessels that spouted. The arterial hemorrhage was very small indeed, but the welling of blood at the movement of each transverse incision was appalling. The loss could not have been less than 10 or 12 lbs. The patient remained *throughout most perfectly still and motionless*. I held his pulse the whole time, and counted it carefully. Immediately on the removal of the tumor it sank to zero; his face became pale and cold, sweat bedewed his forehead, and it was not till his head was lowered by the withdrawal of one or two pillows that he recovered from the collapse caused by so sudden and great a withdrawal of vital stimulus from the heart and brain. The pulse gradually returned, and was found, when first counted, to be 120, very

small, compressible, and intermitting, but there was *not the slightest evidence of consciousness or pain*. It was now deemed necessary by Dr. Taylor and myself to pour some wine and hartshorn down his throat; but as he could not swallow in this state, it was allowed us to dash cold water in his face, blow in his eyes, and fan him, by which means he awoke from his trance, recovered sufficient sensibility to drink some brandy and water, and *presently subsided into perfect repose*; the pulse however remaining very weak, and settling at 100. No active hemorrhage ensued with this reaction, but two or three more small arteries were tied, cold cloths were applied to the raw surface, and the patient was then carefully removed to a clean bed. In the course of the afternoon, as I was informed, some symptoms of collapse occurred, such as vomiting and restlessness, and some seven or eight more vessels were successively secured by the assistants, who remained in watchful charge of him. He passed a good night; the wound was stitched and strapped the following day, and on visiting him this morning I found him looking composed and sleeping soundly: the parts looking well, and with every promise of a most successful cure.—D. STEWART, M.D., *Presidency Surgeon*.—*Calcutta, Oct. 16th, 1846.*”

On reading this, I wrote to Dr. Esdaile's excellent brother, the Rev. David Esdaile, in Scotland, requesting the latest professional news he had received from the doctor. The following is the reply:—

“Manse of Rescobie, Forfar,
“18th Dec., 1846.

“Dear Sir,—In compliance with your request, I have much pleasure in communicating the latest intelligence regarding my brother and his mesmeric doings. I have a letter from him, dated Calcutta, 18th October, in which he tells me that he *has come successfully through the ordeal of the Mesmeric Committee*, appointed by the Government of Bengal. *Two members* of the seven composing this Committee were selected on account of their *notorious opposition to mesmerism*; ‘yet,’ observes my brother, ‘they have signed a report to Government, *confessing to have witnessed seven painless operations in a fortnight*. I have not seen the report, but it is favourable, with some attempts at damaging with faint praise, and doubts of its general applicability; mere grimaces and helpless kickings against the pricks of the doctor-craft, which will be duly disposed of when the report is printed. I am now waiting for orders from Government.

The Governor of Bengal tells me that he wishes me to prosecute the matter into all its practical details, and I have asked for an experimental hospital for this purpose, but have no idea how it will end.

" ' Having finished with the Committee, I gave a public entertainment, three days ago, to some of the leading officials here, when I abstracted a scrotal tumor, EIGHT STONE WEIGHT (THE WEIGHT OF THE MAN'S WHOLE BODY), *without its owner knowing anything about it*, and he is doing very well. Pray tell Dr. Elliotson that the tumor has been voted to him by acclamation, and is in rum, waiting his acceptance. It was proposed to send it to Dr. Forbes, but, on the principle of "*detur digniori*," Dr. Elliotson was preferred. I am glad that *he has lived to defile the graves of his enemies*.' "

" In the conclusion of the letter my brother complains bitterly of a sentence of 'cruel nonsense,' published in his book. As the only remedy, I beg you will be so kind as publish what he says in *The Zoist*. 'What I wrote was—"And may it not be the nervous energy passing off by the organs of sense, the lungs, and periphery of the body, retaining its vital properties, and remaining under the direction of the will for a time, even beyond the surface of the body." There is meaning, if not truth, in this: as it stands, it is mere verbiage. Could it not be corrected? I become every day better satisfied with my theory, and am vexed to see it so mauled.' "

" Trusting to hear of your gracious acceptance of the rare gift presented as a homage to your talents and noble exertions in the cause of science and humanity,

" I am, dear Sir,

" Yours sincerely,

" DAVID ESDAILE.

" John Elliotson, Esq., M.D."

As soon as the mass arrives, I shall have great pleasure in shewing it to any gentleman who may call at my house in Conduit Street.

II. Removal of a Tumor from the Neck.

M. Durand, Professor of Philosophy in the College of France, has sent me the following account of another painless operation in France:—

" We, the undersigned, inhabitants of Cherbourg, having witnessed on this 19th September, 1846, at half-past three o'clock in the afternoon, an operation just terminated, with the greatest success, by Dr. Loysell, assisted by Dr. Gibon,

upon Miss Anne Le Marchand, of Portbail, thirty years of age, placed in a state of mesmeric sleep and *perfect insensibility*, in our presence, we attest and certify to the following facts:—

“At forty minutes past two o'clock the patient was mesmerised to sleep by Professor Durand, at the distance of two metres (about 80 inches) and in less than three seconds. The surgeon, then, in order to satisfy himself of the insensibility of his subject, plunged a long stilette, such as used by dissectors, several times abruptly into her neck; a bottle of concentrated ammonia was also placed under her nose. She continued in a state of immobility; no sensation was perceived; *no alteration was visible in her features: not a single external impression was manifested.*

“At the end of five or six minutes of sleep, the patient was awaked by her mesmeriser, in a second. After a few moments she was re-mesmerised, as at first, but at a still greater distance. The physicians were immediately informed by Professor Durand that the operation might be commenced with perfect safety, and that they might freely converse aloud as to the state of the patient without fear of being heard,—so deep and perfect was her insensibility.

“At ten minutes before three o'clock, the operator made straight downwards, behind and above the mastoid process, an incision eight centimetres in length (above 3 inches). A layer of muscles presented itself first. Then a large gland came into view, which was carefully dissected away in *four minutes and a half.*

“The wound was washed. It was now discovered, what it was difficult to foresee, that there were two other glands; the superior extending its roots deep into the tissues, and in immediate contact with the carotid, the principal artery of the neck: the other, less difficult to isolate, in consequence of its connexion, and lying among the muscles situated in the side of the neck. These two latter glands were extracted in *three minutes.*

“In dissecting the glands, a vein of large capacity was wounded. The surgeon tried to stop the flow of blood by causing the patient to respire, so as to strongly dilate the chest. She instantly did this at the request of her mesmeriser; but, the effort being insufficient, it became necessary to apply a ligature.

“The greater part of the spectators now approached the patient; several medical men introduced their fingers into the gaping wound, which was more than eight centimetres in depth, and distinctly felt the pulsation of the carotid artery.

"During the whole of the operation, Miss Le Marchand remained calm and *impassible*; no emotion agitated her; no muscular contraction took place, not even while the knife was penetrating deeply into the flesh; she in fact appeared like a *statue*; for insensibility had become perfect. No change appeared in her frame; there was no sign of uneasiness, no syncope, no lethargy; indeed the young lady spoke several times. As often as she was interrogated, she replied that she felt exceedingly well, and had no pain whatever. At the invitation of M. Durand, once we even saw her raise herself, and resume her former position.

"The wound was cleansed again. Some minutes afterwards, the edges were united with several pins, between which were placed strips of adhesive plaster, and above these perforated linen lint compresses, an external supporting bandage, and the other dressings necessary in such cases.

"At this period several other persons approached the patient. For a moment, isolation was destroyed by her mesmeriser, and she was enabled to hear the various questions addressed to her. Her replies were given with perfect ease and remarkable calmness.

"When everything was complete, the patient was restored to consciousness in two or three seconds. She smiled, by degrees recognized her position, and perceived that the operation had been performed. To the questions put to her, she replied with lively interest, *that she had not suffered at all; that she had not experienced the least pain*, and had no recollection of what had taken place. Afterwards she retired, and every one present could clearly see in her physiognomy tranquillity and unaffected cheerfulness.

"An extremely remarkable phenomenon occurred in this case. She had only been mesmerised nine times; yet the rapidity with which her mesmeriser was able to pass her, several times in our presence and immediately before the operation, from ordinary life into the most absolute and insensible mesmeric sleep, was almost incredible. At several metres distance from her, even a glance of the eye, a single look accompanied by a firm will, was sufficient to plunge her into this extraordinary state, which is at present so interesting to science, extinguishing as it does all possibility of sensibility to pain. Her isolation from the external world became so complete that she heard no one, not even her mesmeriser, when he did not touch her. This isolation was promoted to the utmost, so that the operator and the medical men and other numerous spectators were at liberty to talk at their ease as much and as loudly as they chose about what

was going on, without any fear of being heard by her, even at the height of the operation.

"In conclusion, the undersigned declare that they are *fully convinced*, after witnessing such a result, that the mesmeric sleep is sufficient, even in a few sittings, to produce the most perfect insensibility in the organs; and that it is of high value in surgical operations of every kind, by *sparing to the unfortunate patient cruel suffering*;* and what is, perhaps, still more formidable, the distressing sight of preparations, and anticipated terrors of the operation.

"Dr. Obet remained constantly *close to the patient*, in order repeatedly and attentively to examine this interesting phenomenon, and observe the state of the *pulse and respiration*, which underwent *scarcely any alteration*.

"The present report has been compared with notes, taken with scrupulous exactness, by M. Chevre, Member of the Council of the Arrondissement and of the Municipal Council of Cherbourg, who noted down with the greatest minuteness all the circumstances of the operation as they occurred.

"[Here follow the names of *upwards of fifty* of the most respectable citizens of Cherbourg, out of which we select the following:—]

"Messrs. Lemaistre, Receiver of the Public Taxes, and formerly Under-Prefect of Cherbourg.

Obet, M.D. of Paris, Corresponding Member of the Royal Academy of Medicine.

Gibon, M.D. of Paris.

Fossey, King's Attorney-General, at Cherbourg.

Le Seigneural, Judge of Instruction to the Civil Tribunal, Member of the Arrondissement Council.

Des Rives, Military Superintendent at Cherbourg.

Henry, Merchant, Commander of the National Guard, & Member of the Municipal Council.

L'abbé Fafin, Chaplain to the Civil Hospital.

Professor Darrington.—&c., &c., &c."

"On the 23rd of Sept. the wound resulting from the operation was completely cicatrised. Yesterday morning, the pins and the bandages which surrounded it were removed, and the young lady was able to walk about part of the afternoon."

* What will Sir B. Brodie, Dr. Copland, and their Exeter and Halifax friends think of these French blockheads?—*Zoist*.

The following accounts were furnished me by Mr. Chandler.

III. Removal of a Tonsil by Mr. Aston Key.

"A CONTRAST.

"My next case may, I think, with great propriety, be headed as above.—In *The Zoist* for October is inserted a letter written by me to Dr. Elliotson describing the removal of a tonsil from the throat of a little girl three years and a half old by Mr. Key, he having promised to permit me to mesmerise her prior to the operation, but proceeding with it without fulfilling that promise, although I was present for the purpose and could have got her asleep in four or five minutes.

"I need not again describe the sufferings and fright of the little patient. Suffice it to say that she has not ceased to talk of them to the present time, and, the other tonsil increasing in size, till its removal was quite necessary, all her friends considered that she would not permit Mr. Key even to approach her. He however appointed Wednesday, Oct. 21st to make the attempt.

"Now mark the contrast!—I had but three days to renew the influence of mesmerism over her as she had been at Margate since the last operation. Nevertheless I resolved to try, and accordingly commenced on the Monday. She slept in ten minutes and remained asleep an hour and a half; Tuesday she was asleep in eight minutes and remained above an hour when she was awoke. On the Wednesday, as Mr. Key's appointment was for twenty minutes past three, I mesmerised her at three o'clock: she slept in four minutes, and on his arrival she was very profound and every thing appeared quite favourable.

"With a bone spatula I made several attempts to open the mouth and depress the tongue, the little patient partially awaking each time but quickly falling into profound sleep again. At length by using a little more force and asking her at the same time in a whisper to open her mouth, (to which request she partially acceded), the tonsil was exposed fairly to view, and Mr. Key seized it with the double hooks, and with a bistoury very expertly removed the greater portion of it. The little girl of course partially awoke, but did not struggle; nor was she aware that anything beyond a mere examination of the throat had taken place. She displayed no fear or surprise. She was allowed to swallow all the blood, as she has a great horror at its appearance, and she permitted me to examine the mouth immediately after the operation, evidently showing that she

was quite unconscious of what had taken place. After Mr. Key was gone, she observed that "she did not dislike him this time as he had not hurt her. Finding her throat rather sore some hours after, and having seen the piece of tonsil on the table, she became suspicious, and said, "she was sure Mr. Key had been cutting her again,"—but was quite satisfied when told that he had only applied something to it.

"Mr. Key very candidly acknowledged that mesmerism had been the means of soothing the little patient and quieting her fears; and I think he will admit that he could not have removed the tonsil without its aid, for he told me on our way to the house, that he did not expect to succeed in removing it.

"The contrast between the two operations was most striking; the first was all noise, fright, and blood, with a deep cut on the tongue, which was very sore for a week; whilst the second was all sleep, sleep, sleep, and not a spot of blood outside the mouth.

"What a triumph for mesmerism!

"I have yet another case to relate of great interest on account of its novelty. It is a case of mesmeric tooth extraction in which the patient appeared to feel at the time, but, when awoke a few seconds after the operation, was evidently not aware of having done so.

"Mrs. Moss, æt. 25, applied to me on the 19th of November to have three teeth extracted, asking at the same time if it could not be done in the mesmeric sleep. I immediately commenced making passes, and, finding her very susceptible, (the eyes following the hand at the very first pass), I continued, and in 25 minutes she slept, though not soundly, as she did not lose her recollection.

"The next day she slept in 12 minutes, and after a few minutes more became quite profound.

"21st. Asleep in 8 minutes. Loss of sensation in the hands and feet, gradually extending to the shoulders, which it did not pass; the line of demarcation being accurately defined (not visibly of course). After awaking her, the loss of sensation remained to the same point, and was removed by blowing or transverse passes, and was instantly renewed by longitudinal ones. I tested the genuineness of the case very beautifully to-day. After blowing to restore the sensation in the hands without making any remark, I restored it to the foot by a transverse pass. This was the first time I used the pass for that purpose, and I may observe that my patient had never seen mesmerism.

"28th. She now goes to sleep in two or three minutes,

and the sensation (though still lost gradually from the hands and feet upwards) disappears entirely in about a quarter of an hour, the last portion being the top of the head. She has for the last two or three days shown perfect catalepsy, which also remains after she is awake.

"She is also re-mesmerised by one pass, a nod, or even a wink; and when awakened again, is quite puzzled to know why she again fell asleep."

IV. *Removal of a Tooth by Mr. Bell.*

"Dec. 2nd. As Mr. Bell very kindly offered to draw her tooth, and arranged this day for the operation, I took my patient to his house at three o'clock; but the day was so dark that before Mr. Bell was ready to attend to us the light became insufficient, and he was obliged to postpone the extraction until another time; having however first tested her insensibility by probing the tooth. To my astonishment she felt it, though afterwards she did not remember doing so. This led me to examine more closely into the phenomena of the case, when I found that she could bear the mucous membrane of her nose pricked with a pin, but could not bear it tickled with a bit of thread; and says, in the sleep, that she is quite confident that she shall not feel the tooth drawn, though she cannot bear it probed. The sequel will shew that she was only partially correct in her prediction.

"On the 8th, I again took her to Mr. Bell, and in a few minutes (although she had been rather uncertain for the last day or two) produced the full effect, and one tooth, a superior molar much decayed, was extracted, accompanied by a start and a slight exclamation from the patient, though on awaking her a few seconds after, she declared she had felt nothing, and Mr. Bell and myself were quite satisfied that she spoke the truth. The loss of sensation remained only about five minutes instead of half an hour, as is usual with her, and the first indication of its returning was a slight pain in the injured gum, from which the tooth had been extracted. I found I could not mesmerise her to have the other teeth extracted on this occasion.

"Sceptics will, no doubt, cavil at this case; and some perhaps will be bold enough to say, "they will not believe either me or my patient on our oaths." But the case is too interesting to mesmerists to be withheld on that account: it is not to be expected that all cases will be equally perfect, indeed it appears to be a rule in mesmerism that no two cases shall be exactly alike. I have mesmerised some scores of

persons, and, though all the cases have been so similar that no one could doubt their genuineness, yet no two have shown precisely the same phenomena. For this reason nothing can be more unsatisfactory than showing beautiful cases to carping sceptics; if everything does not go off just as they may please to *dictate*, (for they will often go this length,) they write down both the patient and operator liars and impostors. An animal of this sort once refused to be convinced that a patient of mine could hear a whisper from one end of a long room to the other, because I would not whisper to her from the next room.

"But we have no right to complain; there are other classes of the genus sceptic besides mesmero-sceptics. A friend of mine was solicitor to a watch-making company, and endeavoured to get a bill through Parliament, that, if carried, would have secured eventually the greater portion of the watch trade of the world to this country. But no; our very wise legislators were sceptical, although there was evidence brought before them from some of the first mechanics of the age. They rejected the bill; but, can it be believed, *on the very same night*, passed the bill for that most ridiculous project, the Flying Machine.

"Mesmerism may occasionally be very useful like opiates, in relieving pain and procuring rest in painful and lingering diseases, where there can be no chance of ultimate recovery. Several cases have been reported, and I think the following a very striking one:—

"An old lady, above 70, has been suffering from chronic disease of the liver, having on several occasions passed biliary calculi; the pain in the back and shoulders is often most distressing, lasting for many hours together. It was found that rubbing the part gave a certain degree of relief. On hearing this, I recommended her daughter to mesmerise her generally: the effect was magical; the very first time it was tried the pain was relieved in a few minutes, and she fell into a beautiful sleep, which lasted several hours, and produced a most beneficial effect. This was often repeated, and with the same results; and when, on several occasions, I operated, the effect was still more striking, and the old lady, who before had considered mesmerism diabolical, now whenever she is in pain quite longs for the arrival of her daughter (who is married and does not live very near her) to mesmerise her.

"A member of my own family occasionally suffers from most distressing hiccup, which a few mesmeric passes instantly stops; indeed there is invariably but one more hiccup

after the first pass. I have also, on two or three occasions, experienced the same good effect in my own person.

"In conclusion, allow me to ask if *The Times* could not be induced to rectify an error which has arisen from a statement appearing in its columns relative to that curious case at Deptford. It was stated that the boy was mesmerised and slept three days, and as *The Times* never awoke him, he has been dead to the world ever since; indeed I have often been told that the boy never awoke, and many object to be mesmerised on that account. Now it would be but justice for *The Times* to state (what I will give them good evidence of if they like) that the boy not only awoke, but even derived benefit from mesmerism.

"I remain, yours faithfully,

"THOMAS CHANDLER.

"58, Paradise Street, Rotherhithe,

"December 11th, 1846."

V. *Amputation of a Leg.*

"On Friday last, a young man named Allan Drew, who had got a leg severely crushed on one of the Flengarnock Iron Company's line of railway, a few weeks ago, submitted to have the limb amputated. Dr. Alexander Miller suggested mesmerising the patient. This the doctor succeeded in doing in a few minutes; and the patient remained in an unconscious state until the operators were sawing the bone, when he awoke. Dr. Miller averred that if he had mesmerised the patient for a few days previous, he could have kept him in the sleep until the operation had been finished."—*Kilmarnock Herald*.

VI. *Tooth extraction.*

"We witnessed the other day, the extraction of a tooth from a young woman, who underwent the operation while in a mesmeric sleep. The tooth, which was a large one, and its lower part quite fresh, did not yield until after a *wrench which would have caused most intense agony to a waking subject*. The girl's *countenance, however, did not undergo the slightest change*, and no indication of sensibility was given. She slept on after the operation was concluded, and when awakened in a few minutes, did not seem to be for some time aware that the tooth had been extracted."—*Northern Warder*.

The patient, the amputation of whose leg at Bridgewater was recorded in the last *Zoist*, died afterwards of consumption, and Mr. King has obliged me with the following further particulars :—

“In my former report I omitted to say that the original disease was necrosis of the tibia and fibula near the ankle, the whole of which joint had become extensively diseased before the patient would submit to the operation.

“Subsequently to the amputation I frequently urged him to be mesmerised for the purpose of dressing the stump during the state of insensibility; but he invariably refused.

“For several weeks, however, the cure went on most satisfactorily; his appetite improved, the diarrhoea and night sweats ceased, and he so far gained strength as to be able to sit up for a short time during the day. I much regret to add that in about a month after the operation there was a return of all the bad symptoms, and he sunk in fact from consumption; his death taking place on the 20th October, just two months after the amputation.”

If this poor rustic had not from some stupid prejudice refused to be mesmerised again, he might have been spared the suffering of dressing his stump, and perhaps would not have fallen into a consumption.

CONVERSION OF THE MEDICAL PROFESSION TO THE SOLEMN
DUTY OF PREVENTING THE AGONY OF SURGICAL OPERATIONS.

Dr. Ashburner has favoured me with the following extract from a letter written in America to Miss Edgeworth, who communicated it to him :—

“With us here in Boston a new adaptation of gas from ether removes all sensibility to pain from the most fearful surgical operations. It is a blessing to the human race unequalled since the first application of vaccination. I speak decidedly, for it has within the last month been so repeatedly tested without failure in our admirable hospital by skilful surgeons, that it is an accredited fact. It is gas from ether, inhaled through the mouth, which produces a tranquil dreamy state, an entire inaction of the muscular system, a total insensibility to pain, but a slight perception of sound, which enters into this sort of dream that is passing through the

mind. It being necessary to take out two of Lizzie's large double teeth three weeks since, I asked to have this gas applied first, having heard of its power only a few days before. They were both taken out with an interval of only five minutes, and she was conscious of nothing but the placing of the instrument and the sound of her father's steps as he walked up and down the room. She suffered *no pain* at the time or afterwards. It leaves no effect except a sort of drowsiness, which passes off in a few moments. At the hospital large tumors have been removed, limbs have been amputated, the patient perfectly unconscious, the flesh and muscles perfectly still, no twitching, no contracting. In one case of amputation, the woman began to rouse at the tying of the last artery, and said she felt something pinch her. Another, waking when all was done, asked impatiently why they did not begin—what they were waiting for.

"It was first applied in this manner by a practical and very skilful chemist in this town of the name of Jackson, and explained by him to a young dentist, who applied for some means to manage a refractory patient. He tried it on himself first, and was so delighted with its effects, that he sent out to hire some one to have a tooth drawn after taking it, for five dollars. Since then his room has been crowded."

I understand that sulphuric ether is employed: a piece of sponge soaked in it is placed in an opening of a bottle with two openings, and the patient inhales through the other opening, so that the air drawn into the bottle and thence into the lungs is necessarily charged with ether. Insensibility is said to occur generally in about three minutes. If this plan produces insensibility to pain in more instances than mesmerism, and quite as innocently and easily as when mesmerism succeeds, it will indeed be a blessing, and none will hail it more joyously than we mesmerists, who have no other object than the good of mankind. It is this consciousness, indeed, and the noble self-respect which this produces, that enables us with all humility and thankfulness to disregard the fiendish malice of our opponents.

In my Pamphlet *On Painless Surgical Operations in the Mesmeric State*, I, in 1843, recorded 1 amputation, 1 removal of a cancerous breast, 1 division of the ham-strings, 1 introduction of a seton, 1 removal of an excrescence, 1 opening of an abscess, 2 severe operations on the jaw, &c., and 32 tooth extractions—*forty painless operations*.

In *The Zoist* are recorded 16 amputations, the removal of 28 tumors—some enormous; 19 various operations by inci-

sions of greater or less length, 3 applications of fire or caustic substances, 3 cuttings away of cancer of the breast, 67 tooth extractions, 3 cuttings out of nails, 1 operation for cataract, 3 for hydrocele, 1 for polypus, 1 for squinting, 3 venesections, 4 introductions of setons and issues—a hundred and fifty-two painless operations.

This overwhelming amount of facts in all quarters of the globe has made no impression upon the medical world. *Not one* of these operations has been copied into the medical journals from *The Zoist*, nor even the name of *The Zoist* allowed to sully their pages.^y This circumstance will never cease to be the most astounding in the history of our profession when studied by posterity, not only by the medical, but by the whole reading public. It will be referred to as an illustration of the character of human nature in this century.

Yet, though this mighty mass of prevention of agony has been as disregarded by the profession as the treasures of the British Museum are by the horses of the cab-stands in all the surrounding streets, I felt certain that, as soon as it was announced that the same thing could be effected by inhaling ether, all the medical world would be alive to the importance of preventing the agony of operations: that the various poor patients who shewed no pain in the ethereal stupor, and declared afterwards that they had felt none, would not be cruelly reviled as impostors, but that their undisturbed state would be considered *full proof* of the absence of suffering, not of concealment of suffering: that their word would be implicitly respected as truth, not scorned as falsehood: that, if they did not shake their left leg while their right was cutting off, this would not be urged against them as unphysiological by Mr. Wakley, Dr. Marshall Hall, Sir B. Brodie, and a host of uninformed disciples: that the operators who published their painless operations would not be styled dupes, mountebanks, quacks, impostors, deserving to be scouted by medical colleges, and met in consultation by no respectable medical man: nay, that the most stupid and dogged opposers of mesmerism would be the first to desire to alleviate pain by the new method, each hospital straining hard to be the

^y The French case of painless operation in *The Zoist* for July, p. 199, was copied by the *Medical Gazette* from the *Times*, and in the very same number, June 19, the editor consistently expresses his surprise and regret that I was appointed to deliver the Harveian Oration. "Considering the notoriety which the orator elect has acquired as a patron of *mesmerism*, we should have supposed that a more appropriate selection might have been made." p. 1088.

* See my Pamphlet *On Operations without Pain*, p.p. 19, 50.

earliest in the race. Such is beginning to be the case. The *London Medical Gazette* which, not only has not noticed one painless mesmeric operation from *The Zoist*, but declares that no one reads—not *The Zoist*, hated word!—the *mesmeric magazine*, except the impostors who send their cases to it,^a announced on Dec. 18th, p. 1085, the new fact, merrily heading the article, "*Animal Magnetism superseded*." Its authority was not, like us, unworthy of respect, but "respectable;" the stupor was not a sham, but was "the most profound sleep;" and the patient *really* went through all "without being sensible to pain, or having any knowledge of the proceedings of the operator." It considers that the process "must be regarded as producing a state of temporary poisoning," by which "sensibility may be so destroyed that that which in the healthy state would occasion severe pain, may be performed without any consciousness on the part of the patient. The *respectability* of the source from which we derive our information, prevents us from doubting that the writer has accurately described what he saw." Truly, the house of Longman & Co., and their reputed editor, Dr. Alfred Taylor, are very complimentary to us mesmerists.

Then the *Lancet* has no hesitation (in the number for Dec. 26, p. 704) to announce the matter: is now struck with the propriety of preventing agony, and protests that such a discovery, if it stand the test of experience, will be an *invaluable boon*; in the same number inveighing against and abusing the mesmeric method with all the distinguishing characteristics of the Wakleyan tongue. Mr. Wakley will not hear of a patent being taken out to limit the benefits of the plan, as the Americans propose on account of the possible abuse of it. He sees no danger, makes no indecent objections.^b

The *Medical Times*, which has not presented to its readers one of the operations recorded in *The Zoist*, though the editor reads it, is fully convinced of the truth of mesmerism, and extracts so largely from other journals that a fruitless attempt was lately made by Messrs. Longman to arrest its extractions, announces that Mr. Liston! yes, Mr. Liston! has taken off a thigh and torn away a diseased toe-nail in the ethereal insensibility, and the editor "hopes to have further particulars on this very interesting subject." We hear from a gentleman present that after the amputation Mr. Liston said to the students, "You see just what it's worth. At any rate it's better than mesmerism." Certainly it is, and greatly better in some respects,—that is if more generally successful,

^a *Medical Gazette*, April 12, 1845 See *Zoist*, Vol. III., p. 201.

^b See Dr. Engledue farther on, p. 600.—*Zoist*.

as innocent, and as capable of repetition, after the operation, to procure ease. When mesmerism takes, it has this advantage, that it may be easily repeated whenever pain comes on or the wound has to be meddled with; that the insensibility may be continued for a length of time; and that nights of good repose may be procured. The poor creature whose leg Mr. Liston removed painlessly, shrieked fearfully with agony afterwards when something was done to him. Besides, mesmerism greatly restores the health and is productive of the highest benefit before the operation and after it, and will sometimes prevent the necessity of an operation.^b

Mr. Liston did not scoff at the poor man: he did not wonder, as he did in the Medical Society in regard to the Nottinghamshire man, whether "the interesting patient was advanced enough in his education to read with his belly;"^c—no, he felt, in common with other medical men, that the world is now beginning to see it no longer doubtful that operations may often be, and ought to be if possible, performed painlessly in the mesmeric state; and he and they jump at any other method of effecting the same thing. To mesmerism and mesmerisers all this is really owing. The idea of procuring insensibility for operations had, through mesmerism, laid such hold on men that the trial of inhaling ether was made: and the success of mesmerism will drive the profession headlong to try the new method, and too generally, as evidently in the case of Mr. Liston, out of a desire to "supersede" mesmerism. We will contribute all in our power to the success of the new method; for we prove all things and cleave to that which is good. But, in cases of operation, mesmerism, when it succeeds, will have the advantages which we have just mentioned; and might properly be added before and after the operation for their sake. The mighty, the inestimable blessings of mesmerism in the cure and alleviation of diseases are of greater extent than its application in operations, and we see no reason to imagine that the stupefaction by ether will be found to possess its remedial powers.

After all this was written, there appears in *The Times*, to-day, Dec. 28, an extract from Dr. Forbes's forthcoming number, containing accounts just received from America of the new discovery.

One patient, it is declared,

"Knew what the operator was doing; perceived him, for example, take hold of the tooth and draw it out, felt the grating of the instruments, but still felt no pain."

^b See Pamphlet, p. 6, 13. ^c Pamphlet, p. 56.

In another,

"The features assumed an expression of pain, and the hand was raised."

Another,

"Flinched and frowned, and raised his hand to his mouth."

But all, on coming out of the stupor, declared they had felt no pain. Dr. Forbes was present at the amputation of the thigh by Mr. Liston, and says that the man seemed partially conscious and declared that in his sleep he had heard some words and felt something was being done to his limb: but that he had felt no pain. Some have known all that was going on, some have talked, and some have recollected much or all afterwards.

What was the conduct of the Medical and Chirurgical Society and of writers in medical journals and newspapers, because the poor man, whose leg was amputated without pain by Mr. Ward in Nottinghamshire, moaned, as in a disturbed dream, after the leg was off, and on waking said he thought he had once heard a kind of crunching, but had felt no pain and knew nothing that had passed? Why, he was violently and coarsely pronounced by acclamation a *trained impostor*, and his case not allowed to remain on the minutes. I beg the world to read pages 10, 11, 33, 34, 55, of my Pamphlet.

The truth, unsuspected by Messrs. Liston, Wakley, Boott, and the rest of the eager antimesmerists, is, that the state induced by ether is somnambulism—the *very same state as the mesmeric*—which varies from deep coma to more or less partial activity of brain.^d In both instances it is induced artificially; but in mesmerism it is induced by a living frame, in inhalation it is induced by an inanimate compound.^e

My triumph has now arrived. The first operation in the sleep-waking state thus artificially induced has been performed in the hospital from which mesmerism was banished, and by the surgeon who was the most violent against it and leagued with Mr. Wakley.

In the *Morning Chronicle* of to-day, Dec. 28, is a letter from Dr. Boott, announcing the American fact to the public, and saying that a young lady had gone through the extraction of a tooth in his house in Gower Street without being conscious of it: that six persons had gone through the same at St. Bartholomew's Hospital in the presence of Mr. Lawrence,—who behaved so unjustifiably at the time of the Okeys

^d I refer to my Pamphlet, p. 41, sq.

^e Palpable matter and a drug.

and has sneered at mesmerism from that period on all occasions. Dr. Boott says,

"I hope the facts will induce surgeons to make trial of inhalation,"

and that the insertion of his letter in the *Morning Chronicle* may

"encourage dentists and surgeons to attempt the alleviation of human suffering."

He assures us that he *immediately* sent the whole American report to Mr. Wakley and to several distinguished surgeons, and is quite grieved to find it will not appear in the *Lancet* for a week, on account of this delay "leading to the infliction of unnecessary pain." This is very proper feeling: most commendable. But reflect a moment, Dr. Boott, on the vast amount of surgical pain and of unrelieved human suffering to which you have been accessory. You are a physician: and you were on the Council of University College^c at the time of the genuine cases of the innocent Okeys: when diseases were cured beautifully by mesmerism, and *when a painless operation was performed on one of my patients in the mesmeric insensibility in your hospital by my clerk under my directions.* You were one of the Council who forbade the use of mesmerism in the hospital, and have been on the Council, I believe, ever since. You obstinately refused to witness even one of the wonderful facts, though it was *your duty* to investigate them. The clear and indisputable operations recorded in *The Zoist* have taken place since then, and yet the prevention of mesmerism in the hospital, *in which prevention you took an active part* with Mr. Quain and Dr. Sharpey, has continued under your auspices: you have allowed agony to be inflicted on the patients who came under the surgeon's knife, and have felt not for them during *eight long years*: and now, suddenly, you think a week is too long (and I also say it is too long) for surgeons to continue to inflict pain!!! When your old anxiety to oppose and injure mesmerism, and *the part you played against it and me* as a member of the Council, are remembered, your present lively humanity and your alacrity respecting ether, with your instant communication of the new facts to Mr. Wakley above all other journalists, would be laughable, were it not melancholy.^d

^c *Zoist*, Vol. IV., p. 2.

^d Pamphlet, p. 65. The feeling which animates all these worthies to such sudden and active benevolence was absolutely confessed by some of the officers of St. Thomas's hospital. They called on a friend of mine, and actually said they liked the new invention because it would knock up mesmerism.

At Bartholomew's, one of the surgeons said last week to a man who

What will Dr. Copland say to this terrible innovation of preventing so useful a thing, "*so wise a provision,*" as pain in operations?—"patients being all the better for it."^e What will Sir B. Brodie say, who told the Society and recently told the students of St. George's Hospital, in his anxiety to crush all attempts at preventing surgical agony by mesmerism, that patients who appear not to feel in what is called the mesmeric state, do feel; that a *large proportion* in ordinary circumstances *scarcely complain of pain!* that it is *not* very uncommon for them to appear like indifferent spectators! and that *it is in the power of almost every one to sustain pain without any outward manifestation!*^f

I see clearly that the profession will now admit the truth of mesmerism. The performance of operations without pain through mesmerism caused men's thoughts to be occupied with the point, and this new mode was devised. The possibility of artificial insensibility by the new method being believed practicable, men will be led to think more calmly of the mesmeric method, and of its many advantages in soothing and strengthening, as well as in causing insensibility in surgical cases. Mesmerism at large will then be calmly considered, and all the good which it can give in states of disease will be sought after. The rapid progress of mesmerism is now secured.

The great want of knowledge of the character of sleep-waking in all its modifications, and even of common sleep and dreaming, will pass away;^g for the patients stupified by ether are evidently in a state of sleep-waking or somnambulism, and this state will become familiar: and such nonsense as was spoken in the Medical Society and has been written in medical journals and newspapers, will cease. Sir Benjamin Brodie will not commit himself much longer by mistaking for a piece of deception the exquisite and genuine case of sleep-waking near Bath that is recorded in the *Philosophical Transactions*.^h

JOHN ELLIOTSON.

wished to have a tooth out, "Well, do you wish to have it with pain or without?" "Without," was the answer. "Well then, breathe this." After all was over, the man was not mocked and insulted, but directed to go and tell every body that they perform operations there without pain. This is all right: but why not have attempted it by mesmerism long ago?

^e My Pamphlet, p. 59. *Zoist*, Vol. IV., p. 3.

^f I must refer to pp. 36 and 37 of my Pamphlet, for Sir B. B.'s inability to distinguish between endurance of pain and insensibility, and his strange argument that the Nottinghamshire man, who when awake was most sensible of pain, was perhaps by nature insusceptible of pain, &c.

^g *Zoist*, Vol. IV., p. 17.

^h Pamphlet, p. 38.

X. Messrs. Forbes, Wakley, and Co., the Antimesmeric Crusaders.

"I would rather stand on the ridge of Etna than lower my head in the Grotto del Cane. By the one I may share the fate of a philosopher, by the other I must suffer the death of a cur."—*W. S. Lander.*

EVERY well-told tale has its point or moral from which instruction is to be obtained. And so the life of every man affords materials for reflection. Whether he be elevated or depressed in the social scale—whether he be rich or poor, philosopher or peasant, a careful survey of his career affords some point or moral, which, all who care for the welfare of the young should point to as a beacon, indicating some fault to be avoided, or some virtuous action to be applauded and copied.

With this object in view we shall make some observations on the course pursued by certain individuals regarding mesmerism. We shall not collect our information from any doubtful source, but draw from the fountain head, from the written words of the men themselves. It may be urged by some that we should direct our attention solely to the advancement of mesmeric science, and that we should cease to bestow attention on the actions of individuals; but, we think, that there is another duty to be performed, and that when the progress of a science has been checked by the frequent display of ignorance and by the most shameful perversion of facts—when the existence of the most beautiful and inexplicable physiological phenomena has been denied, and the discoverers and experimenters have been denounced as fools and visionaries, rank impostors, and detestable quacks, and by these means a cry raised throughout the length and breadth of the land which has caused the honest investigator to pass through a species of martyrdom,—when all this has been done in our own time, in a few years, and when the men who have accomplished this have lived not only to see the error of their way, but in one instance, to confess it, albeit in a jesuitical manner, we ask, is there not some moral to be learned? Is the self-elected critic not to be informed of his fallibility? Is the wilful perverter of truth not to be told, and to be convinced from his own writings, while yet alive, that the *opinions* of the sciolist must give way before the accumulation of *facts*? Is the man who has spent his life in the endeavour to mislead his brethren not to be shewn his iniquity? And are we not to point out to all men the utter irrationality and absurdity of surrendering their reason to the commands of authority, and of neglecting to investigate

a new truth because a few may sneer, ridicule, and denounce? Is this not, we ask, a public duty? It is the neglect of this duty which makes men so bold in advancing their superficial opinions, but, let it be once understood that all those who publish absurd and fallacious doctrines shall submit to the most free and searching exposure, and we have applied a complete check to an evil of the most serious magnitude. The example which we are about to expose is perhaps the most shameful on record. What do we behold? The man whose position demanded the practice of the strictest impartiality and integrity, forgetting his high duty, and leading astray all those who naturally looked up to him for information,—neglecting to inform himself of the rights and merits of the question under discussion, and because the popular voice at the moment seemed to demand an anathema, seeking the unscrupulous pen of some ready but needy fool, and forthwith issuing it. Because a violent and virulent hebdomadal publication, edited by Mr. Wakley, had succeeded in creating "a blaze" in the medical profession; the would-be respectable quarterly, edited by Dr. Forbes, descended to the same course, pandered to the depraved tastes of those it should have striven to elevate and enlighten, and ever since has watched the progress of events, changing the tone of its communications just in proportion as the money-risk became less and less, and the profession were inclined to receive bit-by-bit truth.

Many of our readers will remember the injurious effect on the public feeling which this immoral course produced. So great was the outcry that men were afraid to speak of the subject, and the title of mesmeriser became a term of reproach, and the signal for the pity of some and the abuse of others. Men band themselves together for the purpose of releasing the slave from his chains and the torture-lash, but thought-slavery is still a predominant feature of modern civilization,—men are still tied down to the prescriptions of their forefathers, and in this boasted age of freedom, this vaunted land of liberty, perhaps there never was a period when tongue-persecution was more vindictive in its outpourings, or, when the honest man had more need of caution in promulgating his views, unless, perchance, they chime in, to a certain extent, with the recognized doctrines of society. But some will say, why, there never was a period when men enjoyed such liberty of speech, or, when the press was so unshackled. This is true, but this is not the whole of the picture. Take for example the career of any scientific innovator. It is true that he has liberty of speech—it is true that he may employ the printing-press for the purpose of disseminating his doc-

trines, but look at the penalty. No sooner are his views promulgated than all those who consider themselves interested in "things as they are," commence, not to reason with him, not to disprove his facts, or to refute his arguments, but to damage his character, to propagate slanders, to impute improper motives, to make use of "*scientific capital*,"^a which being interpreted means the adoption of all measures calculated to work on the prejudices of the vulgar and illiterate, and thus to injure the party to be "*put down*." In a late instance to such an extent was this system carried, that not only did the whole periodical literature of the day, with very few exceptions, lend their aid to crush the scientific truth-seeker, but men with large boards were sent through the streets of the modern Babylon, on which was affixed an absurd and disgusting print, tempting the curious and those afflicted with prurient imaginations, to purchase a small pamphlet containing the most abominable and wicked slanders.

Can we as a people boast of our liberty of speech and of our perfect freedom, when we have not yet learned to respect the most sacred right of our neighbour, the right of thought? Can we as a people boast of the power of our printing press, when we permit that power to be in the hands of men who prostitute it for the most base and wicked purposes? It is useless to say, that rational men pay no attention to such proceedings, and that only dishonest individuals would wield the power entrusted to them for an improper purpose. Dishonest enough they are in all conscience, but they are the men society permits to deceive and mislead them. To our view there is something more than dishonesty of purpose, there is a display of the most rampant animalism in the endeavour to "*write down*"^b an individual who is investigating a new truth and therefore helping forward his fellow men;—there is something more than laxity of morals, there is the manifestation of a low, vulgar criminality, when the editors of "*Quarterlies*" again and again sneer at that which they do not understand, and abuse and vilify men who deserve our respect and esteem. Such conduct makes manifest the

^a The Americans at the period of an election speak of "*political capital*" which in plain English means the invention of the most abominable falsehoods, and the circulation of the most exaggerated statements, for the purpose of damaging in public estimation the man, or the party, another party may be opposing.

^b What will not men attempt to write down? Perhaps the only ancient attempt to write down a natural truth which at all equals in absurdity the efforts of the modern mesmeric obstructors, was that memorable movement on the part of the followers of Aristotle, who not only refused to look through Galileo's telescope to see the satellites of Jupiter, but positively attempted to *write down*! these unwelcome additions to the solar system.

absence of those high moral and intellectual qualities which characterize and adorn the perfect man. We write strongly on this point because we have to expose a great public abuse, we have to shew that editors trust to the short memories of their readers, and thinking that their productions are not read a second time, presume that they may change their opinions as often as they please and still keep their character for wisdom.

When a scientific novelty is broached, to reasonable and conscientious men, *this* course appears to be the only one which can be followed by the individual conducting a philosophical publication:—to announce the novelty—to call upon scientific men to investigate the subject, and to report to the recognized channels for the reception and diffusion of information. During this period the editor should not be idle. He should investigate for himself, when this is possible, and when it is not, he should endeavour to ally himself with those who have done their utmost to do so, and by these means to use every effort for the purpose of obtaining a cautious and philosophical report—one, calculated to advance and not to retard genuine science. Every one must agree in the opinion that the system pursued with regard to mesmerism has been the reverse of this. That the man who attempts to instruct others should first instruct himself, seems to us a course, the rationality of which is so self-evident, as to require but little discussion. And yet how frequent are the examples of men raising themselves to the rank of master without the necessary intellectual qualifications, and without bestowing one thought on the moral law which they break through, or, the amount of misery which they produce by the improper bias they give their confiding disciples. It is strange, too, that these superficial men are always carried away with the belief that they are performing a great public good, when they advance their ill-matured opinions on a disputed point; in fact, they become so inflated with the importance of their self-imposed power, as to be utterly regardless of the obligations they incur. To become a public instructor without passing through the preliminary stage of laborious study to ascertain the truth, is in its practical results the same as putting out the eyes of those it is wished to enlighten. We have always endeavoured to expose such men, not from any feeling of ill-will, or spirit of revenge, for the great wrong they have committed, but because it is right and just to draw a strong line of demarcation between the man of science and the superficial babbler—between the real worker and his counterfeit and noisy opponent. The writer who fairly states his facts and his

arguments, even if they be opposed to our own views, shall always receive our most respectful attention,—but the self-elected judge, the man who disseminates error, who perverts facts, who deals in assertions without proof, and supports his opinions by the most flimsy and fallacious arguments, shall be exposed with an unsparing pen.

“Soft and easy touch a nettle,
And it stings you for your pains;
Grasp it like a man of mettle,
And it soft as silk remains.”

On such an occasion we shall not permit ourselves to be influenced by mere feelings of humanity,—justice is our motto, and those kindlier promptings which on less important occasions would have full sway, must here be utterly discarded.^c “Is it,” asks Mr. Stewart, “more criminal to misrepresent a fact, than to impose on the world by what we know to be an unsound or a fallacious argument? Is it in a moral view more criminal, or is it more inconsistent with the dignity of a man of true honour, to defraud men in a private transaction by an incorrect or erroneous statement of circumstances, than to mislead the public to their own ruin by those wilful deviations from truth, into which we see men daily led by views of interest or ambition, or by the spirit of political faction?”

Such then being our opinion of the duty of those individuals who conduct our periodical literature, we simply ask, has Mr. Wakley, the editor of the *Lancet*, qualified himself for the office of judge?

“—— a man must serve his time to every trade
Save censure: critics all are ready made.”

Has Dr. Forbes, the editor of the *British and Foreign Medical Review*, done this? (we beg pardon, but we always place Dr. F. next to the former sage, because he is but a follower in the antimesmeric Crusade, the former gave the cue, the latter was too eager to follow. *De gustibus non est disputandum*. Verily, they shall have their reward.) Did the late Dr. James Johnson do this? Has the editor of the *Medical Gazette* done this? In fact, is there one British medical journal whose pages have been open to the insertion of authenticated

^c We cannot forbear from again quoting an anecdote we related on a former occasion (*vide Zoist*, Vol. II., p. 276.) We are in a position to vouch for the truth of it. “A gentleman who was on intimate terms with Dr. Forbes, and who resided in the country, commenced the investigation of mesmerism in 1841, and after convincing himself of the truth of the science, wrote to Dr. Forbes to inform him of the fact, and to offer to exhibit to him several cases. For this purpose he offered to take him, if he could spare the time, to three separate towns, to witness the experiments of three different mesmerisers. Two letters were written in a fortnight, but no answer was received!”

cases, or the discussion of questions bearing on a subject of so much importance? The editor of the *Medical Times* has to a certain extent done his duty, but his advocacy of mesmerism is not of that decided character which would authorize us to consider him a bold and uncompromising assertor of *what he knows to be true*.

We have not space, if we had the inclination, to refer to all the absurdities, slanders, falsehoods, base insinuations, grovelling conceptions, vulgar and slang inuendoes, &c., which we could cull from the pages of the journals above enumerated; to say nothing of the perverted facts, suppressed facts, and the publication of *facts* which never had an existence,—we shall leave all this, to us, unprofitable work, to some future collector of the absurdities of the would-be scientific, and at present satisfy ourselves with placing before our readers in a succinct form the sayings, doings, and writings of the most notorious,—we cannot say while Mr. Wakley is in this ‘vale of tears,’ the most unscrupulous,—of the party of truth-opposers, Dr. J. Forbes.

There have been *three* articles published in the *British and Foreign Medical Review*. One in April, 1839, another in April, 1845, and another in October, 1846. We select a few specimens.

“To devote an article to the consideration of animal magnetism, now that the English practitioners are one and all ashamed of its name, would be a work of *supererogation*, if the *delusion*, unabashed, were not yet parading itself over some parts of the continent; and if its return to these shores, and to our own hospitals and colleges, at any future period were quite out of the question.”—*British and Foreign Medical Review*. April, 1839. p. 305.

“We propose to ourselves a brief investigation of the existing pretensions of animal magnetism, or mesmerism. In proceeding to prosecute this task, we shall, in the first place, *advance the reasons which, in our judgment*, urge a dispassionate examination of the subject; secondly, we shall point out the kind of evidence we deem necessary for the establishment of each class of the alleged phenomena; and we shall then proceed to discuss the question of their validity.”—*British and Foreign Medical Review*. Apr. 1845. p. 429.

“We hold ourselves in readiness to witness and candidly to examine any novel fact that may come in our way, as we believe our minds to be open to conviction on satisfactory evidence being adduced; *and whilst we have at*

all times pursued this method ourselves, it is the one we would, in conclusion, earnestly recommend to our readers." April, 1845. p. 485.

"If we can quicken its decline where it now reigns in the hearts of nervous proselytes and *dreaming physicians*, or can assist in forming a barrier against a probable revisitation of it, we shall not think the otherwise more than due attention we have given to the *wild productions* which treat of it entirely thrown away."

—April, 1839. p. 305.

"We think that mesmerism has hardly received fair play at the hands of many of our professional brethren, or in the *pages of some of our contemporaries*. Its pretensions, to some extent, however, are too well supported both by the number and respectability of the witnesses to justify an opposition made up almost exclusively of *ridicule and contempt*."—April, 1845. p. 430.

"We conceive, then, that the evidence attesting the fact of certain abnormal states being induced by mesmerism, is now of such a character that it can no longer be philosophically disregarded by the members of our profession, but that they are bound to meet it in the only way in which alleged facts can satisfactorily be either verified or confuted,—by observation and experiment."—October, 1846. p. 484.

"Considering the high sanction which even a temporary belief in the powers of animal magnetism has obtained in this country, we look upon its recent rise and progress, and its abrupt and shameful fall, as *powerfully calculated to degrade a profession which* is certainly, for other reasons, not rising in public estimation."—April, 1839. p. 305.

"In how much better a position shall we be *after investigation* for confuting the imposture, if such it shall turn out ultimately to be, than in continuing to treat the subject with contemptuous disregard! Of one thing let us rest assured, not only the public, but the more sober-thinking of the profession will, ere long, *hold those at a disadvantage*, who, in opposition to facts, apparently well authenticated, can or will but adduce mere unsupported argument, or ridicule."—October, 1846. p. 485.

"There must surely be a sufficient number of persons of *sane mind* in the profession who have thought *as we have thought*, to exempt us from the suspicion of affecting wisdom after the fact, when we say that, from the first *dawn of these diverting but degrading scenes to the last*, from the first burst of blank surprise in the good unscientific public of this country, through all the phases of advancing credulity among the more scientific, down to the last *complete and melancholy explosion*, we have *never* varied from a most hearty, entire, and unconcealed disbelief of very nearly all the phenomena exhibited by all the patients, and related by all the practitioners, without exception." April, 1839. p. 304.

"That there was *gross deception* somewhere, we were always sure; the only doubt we had was as to the precise point where the *deception* began."—April, 1839. p. 304.

"We observed with some little disgust, here and there a practitioner willing to become the *provincial* wonder, and only restrained by his prudence from declaring what a mixture of ignorance and cupidity prepared him to assert and to do."—April, 1839, p. 304.

"But above all we lament to see the *great delusion* supported by one of the ablest physicians of this country, filling the most important chair in the largest medical school of the kingdom."—April, 1839. p. 304.

"When it is considered that men like Cuvier, La Place, Hufeland, and Treviranus, have not refused their testimony as to the reality of some of the facts of mesmerism, we hardly think it right to dispose of the whole question, unexamined, by the facile process of a self-complacent *poo-poo!*"—April, 1845. p. 430.

"From the curious and extraordinary accumulation of records amassed by the animal magnetizers, *we have from the beginning been very much persuaded* that, at the foundation of all the extravagances of the mesmeric disquisitions, there would ultimately be discovered *some truth*."—October, 1846. p. 487.

"That our author and his associates should have conspired to delude, and to mystify their friends and their countrymen at home, without any conceivable motive, we hold, indeed, to be too ridiculous to imagine for a moment."—Oct. 1846. p. 479.

"But when an honest and intelligent witness circumstantially relates, as having occurred, what is already admitted to be neither impossible nor improbable, the presumption, *à priori*, is certainly altogether in his favour."—October, 1846. p. 479.

"Now we maintain that we are not entitled, in reason, to reject the facts, or alleged facts, above stated without at least a fair examination. It were very easy for us to chime in with the ordinary professional ridicule in relation to

such statements; but, in common honesty we conceive that we are bound to take a different course."—Oct., 1846. p. 479.

"Pass a few short months, and the delusion stands exposed; the actors are declared to be deceivers or deceived, the facts so lately boasted of are trampled upon with contempt, and the doctrines built upon them are laughed to scorn."—April, 1839. p. 303.

"Indeed we hesitate not to assert, that the testimony is now of so varied and extensive a kind, so strong, and in a certain proportion of cases so seemingly unexceptionable, as to authorize us, nay, in honesty, to *compel* us to recommend that an immediate and complete trial of the practice be made in surgical cases."—October, 1846. p. 485.

"The fashionable crowd flock to a new *prima donna* or to a watering-place doctor; and the half-converted physicians and surgeons never mention the subject more; for, although *the folly will rise again*, it will scarcely be in their time."—April, 1839. p. 303.

"We ourselves entertain not the slightest bias or prejudice upon either side of the question. We have at no time resolved that the thing could not, or should not, be so."—Apr., 1845. p. 430.

"Again, we say, let it be *tried* upon patients about to be submitted to the knife."—Oct., 1846. p. 486.

FINALE.

THE LATEST BULLETIN ISSUED, *at present*.

Letter from Dr. Forbes to Dr. Elliot, of Exeter.

"Old Burlington Street,
"Nov. 28th, 1846.

"Dear Sir,—I had never heard of your mesmeric controversy before your letter arrived, and at this moment I have not time to look any further into the matter than to read the letter signed 'H. U. Janson,' in the *Western Times* of this day's date. The statements therein made relative to myself *are altogether untrue*,—I mean, as to my having *changed my opinion* of mesmerism (!!) Since the period when I began to pay some attention to it personally, it so happens THAT I HAVE NOT ALTERED MY VIEWS IN ANY RESPECT, AS YOU WILL SEE BY LOOKING INTO THE VARIOUS ARTICLES ON THE SUBJECT OF MESMERISM IN MY JOURNAL," &c., &c. (!!!)

Litera scripta manet. Can any unprejudiced person read

and compare the above extracts, and say that the editor of the journal in which they are to be found has been influenced by a genuine love for science? Is it possible for one moment to suppose, that when the first article was written the editor was anxious to discover by examination the truth or falsehood of mesmeric doctrine? Had he not decided the point without examination, and did he not therefore mislead the medical practitioners of the United Kingdom, and thus retard scientific truth? "*It so happens that I have not altered my views in any respect.*" *Proh pudor!* Is there not something humiliating to be compelled to record such tergiversation, and to proclaim that this disingenuous and unphilosophical individual is a member of our own profession? No man who is influenced by pure and lofty motives could inflict a blow for the express purpose of damaging the reputation of his competitors; much less could he permit his injurious opinions to remain on record, without some attempt to undo the mischief he has produced, and to explain away the unfair advantage he took at a period of professional and popular excitement.

Let it not be supposed that we advocate the absurd doctrine, that because a man has once expressed an opinion, he is to be servilely bound to its advocacy. On the contrary, we esteem the man who conscientiously changes his views, of whatever character they may be; but we expect to be furnished with proof that the change is the result of sincere conviction, brought about by a careful survey of facts and arguments, and not from a timorous subserviency to popular impressions. The man who is not emancipated from the control of mere interest or passion, is surely not justified in arbitrating on a disputed point in philosophy; and if, as in the present instance, he has elevated himself into the office of judge, we should be still less justified in countenancing for an instant the belief that his opinions are worthy of record, or in the remotest degree to be considered as the dicta of a sage.

We trust that this exposure will not only be of service to Dr. Forbes in his editorial capacity, but also to his professional brethren, who appear to us on many occasions to exalt the conductors of their periodical literature into standards of truth. The editor of a journal is as prone to error as his numerous readers; and that past experience does not warrant us in removing Dr. Forbes or his coadjutors from the catalogue of fallible men, this number of our journal abundantly proves.

If we are asked, how is the truth or falsehood of a dis-

puted point in medical philosophy to be ascertained, we answer, by free and unfettered examination and discussion. Enlist all men in the cause—neither forbid nor denounce. Let not the examination be commenced by drawling forth *misereres* on the past weaknesses of men; by publishing a declaration that “the empire of medicine has just passed through an unaccountable paroxysm of credulity,”—that it is determined “to quicken the decline” of the new truth, and “to assist in forming a barrier against a probable revisitation of it,”—that it is lamentable “to see the great delusion supported by one of the ablest physicians of this country, filling the most important chair in the largest medical school in the kingdom;”^d but, rather let it be commenced by shewing men the true method of investigation, and the uses and merits of an inductive philosophy,—by raising a hue and cry which shall bring to our aid all *thinkers*, being impressed with the opinion that if the question is one to be solved by an appeal to reason, that the probability of the desired end being accomplished is increased in the exact ratio that we multiply the number of inquirers. Let argument be opposed to argument, let opinions clash, and from the wordy turmoil good must result, for erroneous doctrines can only be uprooted by proving their fallacy, and this is an appeal to reason.

We contend that it is even now impossible to estimate the amount of mischief which the article published in 1839 produced. The aim was deadly. Men appealed to it on all sides. So triumphant was the editor, that the article was made a means for advertizing his journal, and where this did not reach, it was acutely perceived that a sixpenny pamphlet would, and forthwith it appeared in a separate form; it was circulated in all quarters—advertized in every journal—read by every body—quoted by every body—and every body, including his *confrère* Mr. Wakley, sang the praises of Forbes of the “British and Foreign.” A host of scribblers immediately followed the great authority. It is strange that time has not abated their fury nor diminished their numbers, and still more strange, that they apparently do not perceive that they are now engaged in combatting the general who marshalled and drilled them for the fight. With characteristic cunning he interspersed a few sentences in the article which enables him to refer thereto, and to say when in a difficulty,

^d We beg our readers to remember that these are Dr. Forbes's own words. “The great delusion” refers to mesmerism, and “the ablest physician of this country” refers to Dr. Elliotson, whom he was endeavouring to write down. But the attempt has failed. What is the moral to be learned? It is this: “Let the man who is in possession of a truth take his stand upon it, and the opposing world will come over to his opinion.”

"O! but I never contended that," &c.—"I never said this was impossible,"—"I always acknowledged the probability," &c.; and in this way, if *we* did not take care of his reputation and place his deserts on record, he would sail smoothly on like a genuine expediency-monger—one of the mere worldly wise—turning each event to his purpose, and by each pettifogging trick trying to exalt his own character for wisdom.

The number of medical men who continue to denounce mesmerism, and to vilify and abuse mesmerisers, is wonderful. Every town seems to possess "a little man," who, as Dr. Forbes insinuates, is willing "to become the provincial wonder," and whose ambition is satisfied if he can perpetuate his name by recording it in the columns of a local newspaper. The last two months have given us some very curious specimens. We take one or two promiscuously, and first on the list we have Mr. Garlick, surgeon, who, from the offensive style of his writing, appears to be a veritable personification of the sweet-scented vegetable, enlightening the inhabitants of Halifax, on the 10th of November, 1846, and concluding in the following strain:—

"The eminent physician, John Elliotson, M.D., who has laboured with all his might to ruin his own prospects and bring his profession into disrepute. Sorely has he suffered for the part he has played. His position is irretrievably lost—no man now cares what Dr. E. says or does," &c., &c. Verily, Mr. Garlick, you are "a provincial wonder," and we are too happy to embalm you in the pages of *The Zoist*.

Then we have a Dr. Elliot,* of Exeter, taking charge of the education of the inhabitants of the western division of the United Kingdom, and preserving them from the monstrous doctrines of the mesmerisers, by dealing in wholesale abuse and slander. His letters in the *Western Times* are certainly far from creditable to him. On a late occasion, our friend, Mr. Janson, informed him that Dr. Forbes had been converted. On the receipt of this information he is exceedingly indignant, and forthwith writes to Dr. Forbes, who returns an answer, a portion of which we published in a preceding page. Dr. Elliot is so elated (!) that he introduces it to the good people of Exeter, with the following prefatory flourish. "Hear! O Exeter! Dr. Forbes, Physician to the

* Late Mr. Elliot, of 16, Romney Terrace, Horseferry Road, a poor neighbourhood behind Westminster Abbey. The practice and druggist's shop are now carried on by a Mr. Atkinson. Yet all good men will consider that he then stood far, far higher than he does now, after his unwise effusions against a mighty truth and fellow-creatures who never did him harm.—*Zoist*.

Queen, is NOT a convert to mesmerism, is NOT the 'QUEEN'S MANIAC,' but is still an unbeliever, and one of the brightest ornaments of the antimesmeric party." Dr. Forbes we have no doubt says, "save me from my friend;" and we say it is fortunate that our cause does not require "ornaments" of such a dazzling lustre.

Sir B. Brodie is engaged in watching over the welfare of the students of St. George's Hospital, and Dr. Elliot has published, in the Exeter paper, a second edition of his antimesmeric opinions. The latter individual is so oppressed by his own exertions and the castigations of Mr. Janson, that he seeks the protection of the surgical baronet, for the same reason that the eastern traveller, overcome by the scorching heat of the tropical sun, courts the friendly shade of some gigantic palm. Sir B. Brodie is not an authority in mesmerism. When he has attempted to perform an operation while the patient is in the mesmeric sleep, then, and not till then, is he qualified to give an opinion as to the possibility of such an occurrence. It is a question of *fact* and not of mere *opinion*. In a recent lecture, reported in the *Medical Gazette*, Sir B. Brodie is reported to have said:—

"In the public journals of the last month I have seen an advertisement relating to the establishment of a mesmeric hospital, in which patients are to be mesmerised, in order that they may be subjected to surgical operations without suffering pain, and the names of several noblemen and gentlemen—one of them a cabinet minister—are to be found in the list of patrons of this new institution. It would be well to inquire, have these individuals been themselves present at such a number of operations performed under what is called the mesmeric influence, as would furnish the data requisite for the adoption of a new principle in pathology? Have they had the assistance of competent persons in the investigation of matters with which they are not themselves familiar? Are they aware that a large proportion of those who undergo surgical operations without being mesmerised *scarcely complain of pain*, whatever they may feel: it is not very uncommon for them to converse at the time as if they were indifferent spectators, and *that it seems to be in the power of almost any one under the influence of excitement or a strong moral determination to sustain bodily suffering without any outward expression of what he suffers.*"

For a complete answer to these extraordinary observations, we must refer our readers to Dr. Elliotson's pamphlet, *Surgical Operations without pain in the Mesmeric State*. The only other comment we shall make, is to refer Sir B. Brodie to the convert Dr. Forbes, who says, "If the statements be corroborated, and if insensibility *can* be produced artificially,

surely THE IMMENSE ACQUISITION BOTH TO OPERATOR AND PATIENT IS OBVIOUS AT ONCE. We hesitate not to assert, that the testimony is now of so varied and extensive a kind, so strong, and in a certain proportion of cases so seemingly unexceptionable, as to authorize us, nay, in honesty, to COMPEL us to recommend that an IMMEDIATE AND COMPLETE TRIAL OF THE PRACTICE BE MADE IN SURGICAL CASES.”^e

We grieve to be compelled to refer to such sad specimens of professional ignorance and prejudice, and yet this is not a tithe of what we could quote if we had the space, or if it were important for the advancement of mesmerism to do so. Messrs. Wakley and Forbes, ye are the men who have misled your brethren. Ye are the boasted reformers in medicine, and yet how miserably deficient ye have proved yourselves to be in intellectual acumen and the first principles of justice! Gibbon, with grave sarcasm, said, “It is the first care of a reformer to prevent any future reformation.” With regard to one branch of medical science, your conduct proves the truth and justice of his remark, and yet, cunning as ye are, truth has been more than a match for your efforts. As regards the amount of cunning displayed, Dr. Forbes has certainly beaten his friend, Mr. Wakley. The fogleman has been out-manœuvred by the recruit. Dr. Forbes has announced his conversion in the most jesuitical manner, and if we did not give proof, no person could believe the truth of our statements. Mr. Wakley is attempting the same course, but he fails. We would suggest to him the propriety of holding a consultation with Dr. Forbes—between brothers there can be no occasion to pay the fee—and to propose to him the following problem: “Which is the best way to extricate my journal from its difficulty, and at the same time to avoid compromising its character for consistency?” That Mr. Wakley is now in a transition state—in the “agony of change”—we can give proof. Only *three* years since he addressed the following note to Colonel Davidson, who had forwarded to him a mesmeric communication:^f—

“Mr. Wakley presents his compliments to Col. Davidson, and begs to say that he has carefully read the inclosed communication, but that since he (Mr. W.) is not prepared—for

^e *British and Foreign Medical Review*. October, 1846. p. 485.

^f On May 10th of last year he wrote as follows in his *Lancet*: “We are much obliged to Mr. W. B. Rogers for the case he has forwarded to us, but do not mean to publish anything further on mesmerism, and cannot therefore insert it.” And now he actually feels himself compelled to attack mesmerism every Saturday.

On Oct. 27th, 1838, “We cannot undertake to give publicity to any communication on animal magnetism,” were his words.—*Zoist*.

the size of his journal prevents him—to open his pages to *all* correspondents who advocate or deny the proceedings of the ‘mesmerists,’ he cannot make a deviation from a rule which he laid down in the *Lancet* some years since, namely, to *let the questions be discussed elsewhere, without devoting the pages of the Lancet to recording them.* This regulation he has maintained since the time when the imposture of two notorious ‘mesmeric’ patients was manifested in Bedford Square, and made known to the public in that periodical. Mr. Wakley therefore begs leave—complying with the wish in that case made by Col. Davidson—to return to the Colonel his letter of the 3rd instant.

“35, Bedford Square,
“November 22nd, 1843.”

In the meantime, “the pressure from without”^s became more and more insupportable, and Mr. Wakley became proportionably outrageous.

“When a fill’d kettle, or a pot,
Is very nearly boiling hot,
’Tis then a bit of flaming stick
Will cause it to boil o’er;
Effecting that which twenty sticks
Had fail’d to do before.”

Accordingly, “the pages of the *Lancet*” were opened, and Mr. Wakley *did* “make a deviation from a rule which he laid down.” Within a twelvemonth he employed Dr. C. R. Hall to write a series of half-and-half antimesmeric articles, and this movement was announced to the profession in the following style:—

“In consequence of some recent publications, the *Lancet* will contain a complete Critical History of the Rise, Progress, and Mock Marvels of that Hallucinating Fraud, known by the term, Mesmerism.”

As may be supposed, there was a vast deal of nonsense written by Dr. Hall, but he admitted a sufficient number of facts and statements, to enable Mr. Wakley, when he *shortly* commences to record the operations of Dr. Esdaile at Calcutta,

^s This “pressure from without” possesses extraordinary power. It sometimes makes people go mad, according to *their own definition* of insanity. Thus Sir R. Peel, on the 16th of March, 1839, said the man “must be mad who would permit an open trade in corn.” In 1846, Sir R. Peel, according to his own definition, went mad and *proposed the measure.* Lord Melbourne (the House of Lords not being sufficient witness of his decided opinions) “declared before God that he thought the repeal of the corn laws the wildest and maddest proposition he ever heard in his life;” and yet, in due time, he voted for this same “wildest and maddest proposition.” Dr. Forbes has already displayed similar consistency. We are on the tip-toe of expectation for Mr. Wakley’s Jim Crow evolution.

and the favourable report of the Government investigation thereon, to refer to these articles, and to adopt "the artful dodge" which Dr. Forbes found so pre-eminently useful. However, we shall narrowly watch this unscrupulous individual's editorial movements and gyrations, and we do not think our pen will refuse to perform its office.

We have already had some very singular specimens of antithesis taken from Dr. Forbes's journal, and we must now give, for the purpose of shewing the temper and judgment with which Mr. Wakley writes, two specimens of the same character from editorial articles in the *Lancet*. We beg our readers to remark that these specimens are taken from the same page of ONE number only.

"The medical profession the only authority to decide in questions of mesmerism."—*Lancet*, July 4th, 1846. p. 17.

"The medical profession incompetent to decide disputed medical questions."—*Lancet*, July 4th, 1846. p. 17.

"Look at the chosen audience and instruments of this mesmeric leader—his allies and assistants, taken from the pert folly of the nobility, the weakest among the literary people, high and low ladies, quack clergymen, itinerant lecturers and exhibiting buffoons."

"This pseudo-science is a thing of the drawing-room, and the gossip of the tea-table, rather than of the study and the laboratory."

"Many of the most distinguished among the fellows marked their disapproval by their absence from the (*Harveian*) Oration. Of these were Dr. Chambers, Dr. Marshall Hall, Sir James Clark, Dr. Lee, Dr. Webster, of Brook Street, and many others."

"It is a singular anomaly, but it is *no less true*, that a court of law, or rather the discussions in the medical journals which follow a trial are the *only means* we in England possess of deciding disputed medical questions,—'Is this or that the best test for arsenic?'—'Is it proper to tie the iliac artery in wounds of its smaller branches?'—'Are secondary symptoms in the child capable of infecting the nurse?'—would *in vain* have occupied the pages of a journal or the evenings of a society; in the former case probably they would not have been read; in the latter instance *colleagues would have purposely absented themselves*."

"A trial, we repeat, is the usual mode of solving any disputed medical question."

g Who Dr. Webster is I know not. But I hear that Sir James Clark is never seen within the college walls at an *Harveian Oration*; indeed, he is not a fellow: that Dr. Marshall Hall has rarely entered the building: that Dr. Chambers has seldom of late been seen at the *Harveian Oration*: and that Dr. Lee was there. So large a collection of fellows has not of late years been seen at the oration; several came up from the country, and not

After this, we shall not devote further space to notice his more recent attacks upon Dr. Elliotson. Suffice it to say that they occur weekly, and are sometimes of a most disgraceful character. For a recent specimen of refined taste, we beg to refer to the number of the *Lancet* bearing date Dec. 12th, 1846. We really feel pity for the man who is so lost to all sense of decency as to copy into his journal whatever it may please any scoundrel to write. Is this a proof of the respectability of modern medical literature? And is this the well from which professional men are drinking their weekly supply of scientific nourishment? Is the man who chooses to commit his impure thoughts to paper to be permitted to do so with impunity? And is our profession so debased as to sanction the promulgation of such disgusting and filthy trash?

We appeal to professional men to be on their guard. We ask them to investigate the subject of mesmerism—each man for himself. We say, go to nature; but above all things, avoid the polluting pages of the *Lancet*. We deplore the fact that medical men continue to purchase this periodical, but the tone of society in general is so undignified and so deficient in morality of purpose and high resolves, that we are perhaps in error to expect just now more exalted notions in one particular class. It has been beautifully remarked by a late writer,—“Nowhere is that conduct which is really virtuous regarded with approbation,—nowhere is that which is really vicious condemned: there is no well-directed sensibility; no nice discernment; no correct appreciation of merit; no consistent adherence even to admitted principles: honesty of inquiry is subverted by temptation, or overwhelmed with disgrace and persecution; while unenlightened or criminal acquiescence is fostered and recompensed.”

We feel assured that all will agree with us in the opinion that Dr. Elliotson's career illustrates the truth of the above remarks. Through good report and evil report—in spite of persecutions the most vindictive, and calumnies the most base and degrading, he has laboured on, animated by one feeling only,—the ascertainment of truth. He works not for applause,—his aim is higher and more becoming a rational being. He can say with the great Sydenham, who suffered

twenty of those resident in town were absent. The assemblage of fellows, licentiates, and visitors, exceeded by many times what was ever witnessed within the memory of my informant: and many of the most distinguished men in the law and church were there. Applause was never before heard before or after an Harveian Oration in the memory of the oldest fellow. But at the end there were distinct rounds of applause; and Dr. Elliotson's health was received after dinner with the same cordiality.—W. C. E.

from similar persecutions, "I find that *it is better to assist mankind than to be commended by them*, and highly conducive to tranquillity of mind; for popular applause is lighter than a feather—a bubble—and less substantial than a dream."

W. C. ENGLEDDUE.

BOOKS RECEIVED.

The Stars and the Earth; or, Thoughts upon Space, Time, and Eternity. The Edinburgh Phrenological Journal. October.

The Principles of the Chrono-thermal System of Medicine, with the Fallacies of the Faculty, in a Series of Lectures. By Samuel Dickson, M.D.
&c. &c. &c.

NOTICES TO CORRESPONDENTS.

The communications of Dr. Engledue, Dr. Storer, Mr. G. Smith, Mr. Holland, &c., in our next.

We have shewn Dr. Dickson's letter to Dr. Ashburner, who requests us to say that he was ignorant of Dr. Dickson's opinion upon sleep, when he wrote his paper for *The Zoist* and supported ideas which he had heard expressed by the late Mr. Carmichael of Dublin, and others.

Professor Bush of America, begs us to announce a work by him upon the Doctrines and Disclosures of Swedenborg, and another upon the higher Phenomena of Mesmerism.

Mr. Balby's letter is an advertisement of himself and his friend.

Dr. Elliotson requests us to say that a letter enclosing a fee arrived for him in the autumn, during his absence in Switzerland, desiring an opinion by mesmeric means; and that he returned an answer, that he neither was a clairvoyant nor employed clairvoyants, together with the fee, to the Devonshire post-office, to be called for as directed. Answer and enclosure have not been called for, but have been returned to him. If the writer sees this, he is earnestly requested to enable Dr. Elliotson to return him the fee.

Mr. Garlick.—What this sweet writer will do, we cannot guess. He has told all good people in the Halifax papers that he likes patients to feel pain while he operates on them,—“he prefers his patient in a natural state,”—*au naturel*, though Garlick be there.

We see by the last Jersey paper that a tooth has been extracted painlessly in public from a patient mesmerised by Dr. Collyer.